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UNITED STATES

INTERNAL-REVENUE GAUGERS' MANUAL,

EMBRACING

REGULATIONS AND INSTRUCTIONS, AND TABLES,

PRESCRIBED BY THE

COMMISSIONER OF INTERNAL REVENUE

BY VIRTUE OF

Section 3249, U. S. Revised Statutes.

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REGULATIONS AND INSTRUCTIONS

FOR

UNITED STATES INTERNAL-REVENUE GAUGERS.

TREASURY DEPARTMENT,
OFFICE OF INTERNAL REVENUE,
Washington, April 10, 1895.

APPOINTMENT OF INTERNAL-REVENUE GAUGERS.

Section 3156, U. S. Revised Statutes, confers the power of appointing United States internal-revenue gaugers upon the Secretary of the Treasury, and the act of August 15, 1876 (section 3153 a, "Compilation of 1894"), empowers him, upon the recommendation of the Commissioner of Internal Revenue, to impose the duties of storekeeper and gauger upon one officer where the amount of spirits produced at the distillery to which such officer may be assigned is not sufficient, in the judgment of the Commissioner, to warrant the employment of two officers to perform the separate duties of storekeeper and gauger.

Persons holding commissions as "storekeeper and gauger" will comply strictly with the instructions contained herein for the government of gaugers, while exercising the functions pertaining to that office.

Whenever it becomes impracticable for collectors to secure the services of persons who will accept the office of gauger, owing to the inadequacy of the compensation, they will be permitted to nominate for appointment as gaugers one or more of their deputies, who will perform the work without extra compensation or fees, but actual traveling expenses incurred for gauging will be allowed.

A deputy collector should not, however, serve as gauger while acting as collector, or when deputed for the sale of stamps, or engaged in any other duty incompatible with that of gauger.

FOR WHAT PURPOSE APPOINTED.

Under the internal-revenue system of the United States, distilled spirits are made largely the source of income to the Government, secured by laying a tax upon each proof-gallon produced when the spirits are at or above proof, and each wine-gallon when the spirits are below proof. United States internal-revenue gaugers are appointed to correctly determine the number of such gallons of spirits produced and drawn into casks or packages to be put upon the market, and to make record of the same by the required marks, brands, and stamps upon the casks or packages, and upon required reports.

GAUGERS' FEES AND EXPENSES.

Section 3157, Revised Statutes, provides that "gaugers shall be entitled to receive such fees, to be determined by the quantity gauged, as may be prescribed by the Commissioner of Internal Revenue; and said fees, together with their actual and necessary traveling expenses, shall be verified by their oaths, and shall be paid by the United States monthly."

In accordance with this provision, the following fees per wine-gallon have been prescribed, to be computed as hereinafter set forth:

FEES.

For the first twenty gallons each day, five cents per gallon.

For the next forty gallons each day, two cents per gallon.

For the next two hundred and forty gallons each day, one-half of one cent per gallon.

For the next seven hundred gallons each day, one-seventh of one cent per gallon.

All over one thousand gallons each day, one-tenth of one cent per gallon, subject to the limitation of five dollars per day.

(See Table No. 9, herein.)

The above rates apply to all spirits entered into and withdrawn from warehouse; to fruit brandy; to spirits gauged for rectifiers; and to gauging done under special orders of this office.

The compensation of a gauger is by law limited to "five dollars per day while actually employed." The number of wine gallons gauged by him during the month will be divided by the number of days *employed*, and the prescribed per diem fees will be allowed for the daily average amount so found to have been gauged, subject to the limitation of five dollars per day.

A gauger will be considered as being on duty and *employed* when he is necessarily traveling on official duty, when on special duty by order of this office, and when under regular assignment and present for duty he performs some gauging at one or more rectifying establishments or is present for duty at a grain or molasses distillery while in operation. When a distillery is under regular suspension the withdrawals from its warehouse should be in charge of a gauger under regular assignment to other duty. A gauger whose sole duty is to superintend the withdrawals of spirits from warehouses of one or more distilleries during regular suspension, will be allowed for the days only on which withdrawals are made and the days necessarily employed in traveling in the performance of such duty. A gauger will not be allowed pay for any day during which he was not present at his place of assignment. When no gauging is done on any day for which pay is claimed, the gauger must state in his itemized statement,

inside of the account, how he was employed on such day, and before approving such account the collector must satisfy himself that the gauger is, by reason of assignment and presence for duty, entitled to pay for each day so charged.

A gauger who is necessarily employed a considerable portion of his time in traveling, while in the performance of his duties, and whose fees, at the rates herein prescribed, are thus, in the judgment of the collector, inadequate to reasonably compensate him for the service performed, may be granted a special rate of fees upon a full statement by the collector of all the facts in each case, showing why special action thereon is deemed necessary and just. This special certificate and recommendation of the collector must accompany each account in which the above fees are thus deemed inadequate. It is enjoined upon collectors that they see that gaugers so assigned perform the gauging in their respective divisions in the shortest practicable time, and at as little expense as possible.

EXPENSES.

The actual and necessary traveling expenses incurred by a gauger in the performance of official duty will be allowed. He must make an itemized statement, inside of his account, of all expenses incurred on *each day*, stating the amount and character of each item separately. He must state where he starts from *each day*, and name the distillery or distilleries and rectifying establishments visited. The distance between any two or more places visited on the same day must be given, and also the whole distance traveled on each day. When both public and private conveyances are used on the same day, the distances traveled by each should be stated. Every item of expense exceeding one dollar, except for travel by public conveyance, must be attended by its proper voucher. Hotel bills *must state the time and rate per diem.*

If a gauger uses his own horse under the saddle, or his own horse and buggy, he may be allowed to charge for the former not over one dollar per day, and for the latter, one dollar and fifty cents per day, for the days actually and necessarily used when in the performance of his duties, not within the limits of a city or town. But when the distance traveled does not exceed ten miles per day for the *continuous* use of his own horse under saddle, or of his own horse and buggy, the compensation shall be limited to fifty cents per day for the former, and to one dollar per day for the latter.

In all cases, when practicable, public conveyance should be used. When omnibus or hack fare is charged, the distance traveled by such conveyance must be stated; otherwise it will not be allowed.

Where a gauger is assigned to but one place of duty, or to more than one, but all located within the limits of the same city or town, any charges for traveling expenses must be supported by a special certificate of the collector that such expenses were necessary. In other assignments, embracing two or more grain distilleries or rectifying establishments, the gauger is expected to charge only from the one where his services are mostly needed.

When it is necessary for a gauger to hire a horse or a horse and buggy for traveling on official duty, he will be expected to do so upon the most favorable terms for the United States, and if obliged to engage it for a number of days in the month it should be at a reduced rate. Should a gauger disregard this injunction, the amount charged will be reduced to what is considered a reasonable rate.

Gaugers will be furnished by the collector with official envelopes in sufficient quantities to enable them to transmit their reports, without expense for postage.

Each internal-revenue gauger is required to make up his monthly account of fees and expenses *in duplicate* on Form

150, and forward the same to the collector for his approval within five days after the expiration of the month in which the fees were earned and the expenses incurred, and accounts delayed beyond that time should be accompanied by an explanation of the cause of the delay. The original, with the necessary vouchers for expenses attached, should be forwarded to the Commissioner within ten days after the expiration of the month for which it is made, and the duplicate retained by the collector in his office. It is suggested that a rubber stamp be used by the gauger in printing his name at the top of the bill and in the indorsement of the same, but the signature to the affidavit and receipt must be written.

Gaugers should not assign their accounts, as the drafts in payment thereof will, in all cases, be made payable to the gaugers and sent to the care of the collector, without regard to any assignments that may be made.

No internal-revenue gauger shall charge or receive any sum of money, fee, or compensation of any kind whatever, other than the fee prescribed by the Commissioner of Internal Revenue and paid by the United States, for any cause whatever connected with the performance of his official duties as a United States internal-revenue gauger, under the penalty of removal from office.

The Commissioner of Internal Revenue is authorized by law to prescribe the fees for gauging, and the rules and regulations relative thereto, and he reserves to himself the right, after any gauger has rendered his account to this office, to investigate it and decide what fees are to be paid for work performed, and what expenses allowed, as shown therein, whenever such special decision is, in his judgment, just and expedient—subject to the limitations prescribed by law.

BEFORE ASSIGNMENT TO DUTY.

Before any United States internal-revenue gauger can be assigned to duty he must "take an oath faithfully to perform his duties, and shall give bond, with one or more sureties, satisfactory to the Commissioner of Internal Revenue, for the faithful discharge of the duties assigned to him by law or regulations; and the penal sum of said bond shall not be less than five thousand dollars." (See section 3156 United States Revised Statutes.)

Neither a distiller, rectifier, nor wholesale liquor dealer will be accepted as surety on the bond of any gauger or storekeeper gauger; and in his certificate on the back of every such bond, as to the sufficiency of the sureties, each collector will add a statement that neither of them is a distiller, rectifier, or wholesale liquor dealer.

UNDER WHOSE DIRECTION SERVICES ARE TO BE RENDERED.

Section 3156 directs that "the duties of every such gauger shall be performed under the supervision and direction of the collector of the district to which he may be assigned, or of the collector in charge of exports at any port of entry to which he may be assigned." The collector may assign gaugers to duty at any place within his district, or transfer them from one place of duty to another within the district. The special attention of collectors is directed to the importance of exercising a strict surveillance of the gaugers who are thus placed under their supervision, and of requiring of them a full compliance with the law and regulations in the discharge of their duties.

Under the provisions of the act of August 15, 1876 (section 3163a, "Compilation of 1894"), the Commissioner of Internal Revenue is empowered to suspend or transfer gaugers.

Section 65 of the act of August 28, 1894, provides:

That internal-revenue gaugers may be assigned to duty at distilleries, rectifying houses, or wherever gauging is required to be done, and transferred from one place of duty to another, by the Commissioner of Internal Revenue, in like manner as storekeepers and storekeepers and gaugers are now assigned and transferred.

Authority is thus conferred upon the Commissioner of Internal Revenue to assign gaugers to duty wherever gauging is required to be done, and to transfer such officers from one place to another, in his discretion, and in the exercise of such authority he will thus assign and transfer gaugers when, in his judgment, such course will best subserve the interests of the service.

Except when otherwise directed, collectors may assign gaugers to duty at any place within their respective districts, or transfer them from one place of duty within the district, making due report of such action on Form 242, revised. Collectors are expected to assign gaugers with due regard for economy, and not to have a larger number under assignment at one time than the requirements of the service demand.

UNITED STATES INTERNAL-REVENUE GAUGERS TO FOLLOW LAW AND REGULATIONS, ETC.

Section 3249, United States Revised Statutes, authorizes the Commissioner of Internal Revenue to "prescribe rules and regulations to secure a uniform and correct system of inspection, weighing, marking, and gauging of spirits." The condition of the bond required of gaugers is that they will faithfully discharge the duties assigned them by law or regulations. Their first efforts after appointment should be to acquire a thorough knowledge of all the requirements of the law and regulations relating to their office. The important bearing of their duties upon the revenue and

commercial interests of the country imperatively demands that carefulness and accuracy of execution should be observed at all times. This can only be secured by those appointed to the office of gauger qualifying themselves fully in all the duties pertaining to their position before commencing work.

GAUGING INSTRUMENTS.

Section 3249, Revised Statutes, authorizes the Commissioner of Internal Revenue to prescribe for use such hydrometers, weighing and gauging instruments, or other means for ascertaining the strength and quantity of spirits subject to tax, as he may deem necessary.

STANDARD GAUGING ROD.

The instrument known as the Prime and McKean combination gauging rod is prescribed by the Commissioner for finding the capacity of casks and packages, when the same is not determined by the use of the weighing beam, and said gauging rod must be procured and used by all gauging officers assigned to duty at places where its use is required.

Until otherwise directed the gauging rod will be used for the official determination of the number of gallons of spirits in casks or packages as enumerated in the four following paragraphs. The weighing beam to be employed as directed on page 15, herein.

1. On regauging casks or packages of spirits which did not have their weight determined and marked when filled.

2. At all fruit distilleries where the production is so limited as not to require the attendance of a gauger at least twice a week during the season when in operation. (All fruit distilleries producing 10,000 gallons of brandy, or above, annually, should be visited by a gauger at least twice a week during the season.)

3. At the establishments of rectifiers rectifying less than 20,000 proof gallons of spirits annually.

It is expected that the records of the rectifying business, at all houses where the inspection is by the use of the rod, will be carefully scrutinized from month to month to determine if at any time the quantity of spirits rectified during any special tax year exceeds 20,000 gallons, and whenever that point is reached collectors will take measures to require the use of the weighing beam.

4. For ascertaining the contents of casks or packages of rectified spirits which contain saccharine matter or other material to such an extent as to prevent the hydrometer from indicating the true per cent of proof.

In such latter cases, however, the gauger, when on duty at a place where weighing is required, will enter on his return the words "Sweetened Spirits."

Applications for the rod, or for any portion thereof, must be addressed to the Commissioner of Internal Revenue, and at the same time the price in a money postal order or certified check must be forwarded to the *National Metropolitan Bank of this city*, payable to the order of that bank. *In no instance must the remittance be sent to this office, or be made payable to the order of the Commissioner.*

The prices of the rods are as follows:

44-inch solid metal rod, complete	$10.00
44-inch solid metal rod proper	4.20
44-inch fixed caliper	1.50
44-inch sliding caliper	1.30
44-inch mean diameter scale	2.00
44-inch head slide	1.00
62-inch solid metal rod, complete	12.00
62-inch solid metal rod proper	5.00
62-inch fixed caliper	1.70
62-inch sliding caliper	1.60
62-inch mean diameter scale	2.50
62-inch head slide	1.20

WANTAGE ROD.

For determining the wantage, or ullage, in casks, Prime's Patent Wantage Rod is prescribed, the price of which is $3.25.

This instrument must be procured and used by all officers who are required to procure the standard gauging rod, and application and payment for the wantage rod must be made in the same manner as directed in the case of the gauging rod.

HYDROMETERS.

The standard hydrometers, for weighing or determining the proof of distilled spirits, are supplied for the use of internal-revenue gaugers, at the expense of the Government, on the application of collectors, which application should be addressed to the Commissioner of Internal Revenue.

These instruments are necessarily expensive, in consequence of the strict accuracy required in their manufacture, and internal-revenue officers are therefore expected to exercise due economy in making requisition for the same, as well as care in their use.

Neither full nor partial sets should be ordered in excess of the immediate demands of the service. Where, however, the needs of the service justify, a limited supply of hydrometer stems and thermometers will be furnished to collectors on requisition, in order that loss by breakage may be replaced without delay.

It is required that report be made to this office immediately upon the issue of any instrument from the stock on hand, stating to whom the instrument was issued and the occasion of such issue.

Complete sets of hydrometers will not be supplied to districts in excess of the number of qualified gauging officers therein, except that, when deemed necessary, an extra set will be furnished, to be retained in the collector's office, for use in testing the other instruments in the district.

Where an extra set is on hand for such use, it will be issued to a gauger requiring the same, on the receipt of a new set, so that the set last received will be constantly retained for use as standard.

When collectors have a standard hydrometer in their office, they will cause the Government instruments within a reasonable distance to be tested at stated intervals, and all the sets in the district will be tested as often as once in six months.

Gaugers will be required to make an occasional test of the instruments in their hands by comparing, in spirits of the proper strength, a stem of a lower per cent with the stem of the next higher per cent, at or between the points where both stems indicate the same per cent.

When requisition is made for sets of hydrometers to replace defective ones, the nature of the defect must be explicitly stated; and also whether the defect is in the stems, the cup, the thermometer, or the case. When extra stems are required, the highest and lowest numbers on each such stem must be stated, in order to secure accuracy in filling the requisition.

Requisition should be made to complete sets only so far as the needs of the service require. It is not necessary, in all instances, that the gauging officer shall be supplied with a full complement of hydrometer stems, as the No. 2, or "B," stem will be sufficient for the use of many officers.

Broken hydrometer stems and thermometers will not be returned to this office. If, however, such instruments are found to be incorrect and unbroken, they will be carefully packed and returned by express, first attaching to each instrument a statement showing the nature and extent of its inaccuracy, and where and by whom it was used.

United States internal-revenue gaugers will be held responsible for the careful usage of the hydrometers in their possession, and any carelessness in handling, result-

ing in the breakage of stems or other damage, will be noted against them. Upon retiring from office, or upon being transferred to another district, gaugers will turn in the hydrometers to the collector of the district in which they have been assigned, taking his receipt therefor.

Collectors will not approve the final account of a gauger retiring from the service until he has surrendered the Government instruments in his possession.

Any United States internal-revenue gauger using other than the standard instruments will be recommended for dismissal from office, and be held responsible upon his bond.

WEIGHING BEAM.

Under authority conferred in section 3249, of the Revised Statutes of the United States, Fairbanks' weighing beam has been prescribed for use in weighing distilled spirits, and the same will be supplied to, and exclusively used by, United States gauging officers as follows:

At all grain and molasses distilleries, and at general and special bonded warehouses.

At all fruit distilleries producing 10,000 proof-gallons of brandy or over, annually, and at those where the attendance of a gauger is required at least twice a week during the season.

At the establishments of all rectifiers rectifying 20,000 proof-gallons, or over, annually, and at all such establishments at which the daily attendance of a gauger is required.

For circumstances under which the inspection of spirits is to be performed by the use of the gauging rod, see pages 11 and 12 herein.

USE OF THE INSTRUMENTS.

Before entering upon the discharge of their regular duties, gaugers should thoroughly familiarize themselves with the instructions as to the use of the gauging and weighing

instruments, practice handling the same, and reading the indications, in order to acquire quickness and accuracy in their use.

GAUGING ROD.

The capacities of casks are ascertained by three measurements, viz: the head diameter, the bung diameter (a combination of the two producing the mean diameter), and the length.

MEAN DIAMETER.

Prepare the rod for the ascertainment of the mean diameter by first placing the mean-diameter scale upon the rod proper, with the screw attachment toward the head of the rod, and with the manufacturer's stamp on the scale in a line with that on the rod (which latter condition must be observed in adjusting all the parts of the combination rod). The head-slide will then be slipped over the point of the rod, with the stationary projection pointing upward.

Having thus prepared the rod, the gauger will seize it with one hand above the mean-diameter scale, the other hand upon the head-slide, and place the point on the inner side of the lower chimb of the cask, close against the head, and bring the projection of the head-slide against the inner side of the upper chimb, holding the rod at an angle of 45 degrees, as shown in the cut, Fig. 1, page of illustrations. He will then hold the head-slide firmly in place, and raise the mean-diameter scale so as to leave a clear space between the bottom of the scale and the top of the head-slide, and while in this position he will cause the rod to describe an arc, observing at the same time the head diameter as shown on the face of the rod immediately above the head-slide. When it is thus seen that the rod is held at such an angle as to indicate the mean diameter of the head, the head-slide will be held firmly in place, and the mean-diameter slide gently moved downward until it rests upon the head-slide, when the gauger will fasten the mean-diameter scale

in this position by turning the thumbscrew at the top. It will be seen that the bottom of the scale will thus indicate the same on the rod as the top of the head-slide. The rod will be applied to the stamp head of the cask, in case but one head is measured. The gauger will then remove the head-slide from the rod, and insert the rod into the cask at the bunghole, the point resting opposite the bung. He will then draw the overslide up until the lip strikes the under side of the bung stave at the quarter; that is, at a point midway between that part of the bunghole which is nearest the end of the cask and that part which is nearest the side. (See Fig. 2, page of illustrations.)

In taking this last measurement, the gauger will endeavor to avoid inequalities in the cask, such as a crack where two staves meet, where the point of the rod rests, or where a portion of the inner side of the bung stave is split off by the boring of the bunghole, etc. Having taken the above measurement, he will then remove the rod from the cask, carefully retaining the slide in position; raise the rod upward until the bottom of the slide is on a line with the eye; read the figures indicated on the scale at the bottom of the slide in the appropriate column, according to the variety of the cask being gauged; find the same figures in column "A" of the scale, and follow the line *above* the figures, turning the rod to the left to the corresponding line upon the face of the rod, which latter line will indicate the mean diameter, which will be chalked upon the cask.

In case the line in column "A" should fall between the lines on the face of the rod, the line nearest the line in the "A" column will be taken as representing the mean diameter, and if there is a doubt as to which line is the nearest, the under line should be read, except in cases where the overslide rests at the "double number" in column "B," "C," or "D," as the case may be, when the upper line on the face of the rod should be read if the slide rests at the

upper double number, and the lower line if the slide rests at the lower double number.

In order to use the mean-diameter scale intelligently, the gauger should familiarize himself with the principle of its construction, which is based on the rule for the determination of the mean diameter; that is, multiply the difference between the head and bung diameter by the decimal .55 if the cask is of the first variety, by .63 if of the second variety, and by .70 if of the third variety. (See instructions under the head of "varieties of casks," on page 30.) The product being added to the head diameter produces the mean diameter. The "A" column on the scale indicates, in inches and tenths of inches, the distance from the foot of the scale, the first line "1" being one inch from the foot, "1.1" one and one-tenth inch from the foot, and so on.

After the rod has been applied to the cask, as above, the foot of the scale indicates on the rod proper the head diameter of the cask, and the lower part of the overslide, at the lip, the bung diameter, and thus the difference between the head and bung diameters is made to appear in the "A" column, at the lower part of the overslide.

As the figures appearing in the "B," "C," and "D" columns are obtained by multiplying the figures on the same line in the "A" column by the decimals .63, .70, and .55, respectively, retaining but one decimal figure, it follows that the figures appearing in the appropriate column at the foot of the overslide represent, in inches and tenths of inches, the amount to be added to the head diameter to produce the mean diameter; therefore, by finding in the "A" column the same figures that appear at the foot of the slide in the "B," "C," or "D" column, according to the variety of the cask being gauged, the mean diameter will appear on the face of the rod adjacent to the line above the said figures.

To illustrate: suppose the rod shows the head diameter to be 19 inches, and the bung diameter to be 22 inches, the

difference between the two ("3") would appear at the foot of the overslide, in the "A" column, and "1.9" in the "B," or "2 var." column, the latter figures being obtained thus: $3 \times .63 = 1.89$, or 1.9 as nearly as can be represented by retaining but one decimal figure.

By following the line above "1.9" in the "A" column, 20.9 appears on the face of the rod, being the mean diameter in this instance ($19 + 1.9 = 20.9$).

LENGTH OF CASKS.

The gauger will prepare the rod for finding the lengths by sliding the fixed caliper arm having the spring on the head of the rod, observing care to have the spring bolt enter the hole in the rod, so that it will remain stationary, and then slide the movable caliper arm over the point of the rod, so that the arm will be in line with the fixed caliper arm.

He will apply the rod in ascertaining the lengths of casks as follows: Standing at the head of the cask he will support the rod in the middle with the left hand, holding the top of the sliding caliper with the right hand.

He will then place the rod on the cask, in a line with the bung stave, allowing it to rest on the braces of the caliper arms, the fixed caliper being lightly held against the head of the cask, opposite to where he is standing, by means of the left hand, which should be near the bunghole.

He will then, with his right hand, move the sliding caliper against the other head of the cask, taking pains to move the caliper with care and gentleness. (See Fig. 3, page of illustrations.)

The length of the cask will be indicated by the figures on the top of the rod, at the inside of the movable arm.

The rod is graduated so as to allow for heads of three-fourths of an inch in thickness, and gaugers are not permitted to make any additional allowance except when espe-

cially authorized by the collector; and when so authorized, they will make frequent examination of the heads, by boring and otherwise, in order to determine as to their actual thickness. In all instances where a greater allowance is made for the thickness of the heads than the allowance made by the standard gauging rod, the guager will mark on the heads of the casks, in a legible manner, the words, "*Head —— inch thick,*" inserting in the blank the actual thickness of the head, in inches and tenths of an inch.

In taking the length of twenty-gallon packages or less, an addition of one-half inch to the caliper measurement will be made, unless the gauger knows that such packages have heads of at least three-fourths of an inch in thickness. Thus, if the caliper shows 19.4 inches the length will be called 19.9 inches.

When packages are used, the capacity of which can not be ascertained by the ordinary method, but by the use only of the rod proper, to determine dimensions, the gauger must ascertain the precise thickness of the materials composing the package, so as to arrive with entire accuracy at the inside measurements, and from these, when obtained, he must compute the cubic contents of the package in gallons and fractions, if any, of a gallon.

Gaugers will observe the heads of the casks before determining the length, and in case they are convex, or concave, or if the casks have heretofore been used, and the heads rendered thinner at points by the scraping, etc., incident to the required removal of the marks, brands, and stamps, the mean length will be determined by applying the caliper arms to various portions of the heads. The length thus found will be chalked upon the cask. Turning to Table No. 1, hereto appended, where the mean diameter, as found, is stated in the upper margin, and the length, as found, is stated in the left-hand margin, there will be found beneath the one and opposite the other the number of wine-gallons which the cask will hold.

WANTAGE ROD.

In case the cask is not full, the wantage will be determined by the use of "Prime's patent wantage rod," as follows:

Before applying the rod care should be observed to see that the cask stands level. The handles of the rod should be grasped by one hand and separated by the use of the thumb, the index finger pressing against the under side of the lower handle. With the other hand hold the rod proper up against the handle. While in this position the instrument will be inserted into the bunghole of the cask with the lower lip pressing on the under side of the bung stave.

The handles will then be pressed firmly toward each other, so that the upper lip will rest on the upper side of the stave. While the lips are thus made to firmly grasp the stave the scale will be moved downward until the flange rests on the overslide, pains being taken to hold the rod plumb during this operation. The scale must not be permitted to drop by its own weight, but be moved to place without jarring the rod or agitating the contents of the cask. As soon as the flange on the slide rests on the lip of the overslide, as above, the scale will be immediately drawn upward to its former position, and thus held while the lips are unclasped by separating the handles by means of the thumb of the hand which grasps the same.

By reading the wet line in the appropriate scale on the rod the wantage will be determined. In observing the wantage the graduation nearest the wet line must be read. When the wet line is midway between the graduations, the line indicating the greater wantage will be read. When, however, the wet line indicates that the wantage does not exceed one-fourth gallon, the cask will be marked as full. (See instructions for "Allowance for wantage" on pages 24–26.)

The scale on the rod is graduated for casks having a capacity of 20, 23, 25, 27, 36, 40, 42, 44, 47, and 64 gallons, and should be applied to the various capacities as follows:

The 20-gallon scale will be used when the capacity of the cask is from 18 to 21 gallons, inclusive.

The 23-gallon scale, when the capacity is from 21½ to 23½ gallons.

The 25-gallon scale, when the capacity is from 24 to 25½ gallons.

The 27-gallon scale, when the capacity is from 26 to 29½ gallons.

The 36-gallon scale, when the capacity is from 30 to 37 gallons.

The 40-gallon scale, when the capacity is from 37½ to 41 gallons.

The 42-gallon scale, when the capacity is from 41½ to 43 gallons.

The 44-gallon scale, when the capacity is from 43½ to 45 gallons.

The 47-gallon scale, when the capacity is from 45½ to 49 gallons.

The 64-gallon scale, when the capacity is from 62 to 66 gallons.

In case the capacity of the cask is not such as is provided for above, the number of dry inches in the cask will be determined by observing the point reached by the spirits in the column of "D. inches" and referring to the "Ullage or wantage table" herein—Table No. 2.

To find the ullage of a cask which is less than half full, bring down the scale so that the flange rests upon the lip of the overslide as above, and fasten it in that position by turning the eccentric button on the top of the scale into the adjacent slot. Insert the entire rod into the cask until its foot rests upon the bottom stave, jarring being avoided as before. Then withdraw the rod from the cask, and the line

reached by the spirits in the column "W. inches" on the face of the rod will show the depth of the spirits in the cask in inches and tenths of inches. Then bring down the overslide until its upper side rests on the corresponding line in the column of "D. inches." Hold the scale firmly in this position, turn the rod to the column indicating the capacity of the cask being gauged, and the number of gallons in the cask will be indicated at the upper side of the slide. Deduct the number of gallons in the cask from its capacity, and the remainder will be the wantage.

For instance, if the cask has a capacity of 42 gallons, and the wet line reaches 6.4 inches in the "W. inches" scale, by setting the overslide so that 6.4 is indicated at its upper face in the "D. inches" column, "10" will be found at the upper face in the "42" column, showing that there are 10 gallons in the cask. Deduct this from the capacity, and a wantage of 32 gallons will be shown.

If the gauger is not provided with the standard wantage rod, the wantage will be determined by means of the wantage scale, at the upper end of the combination rod, as follows:

Place the mean diameter scale on the rod so that the end having the lip attachment will be on the line which separates the lineal graduation from the wantage scale, that is, on the upper of the double lines at the commencement of the wantage graduation, and fasten the scale in this position by turning the screw. The gauger will then insert the head of the rod into the bunghole, care being observed to have the cask standing level, the bunghole uppermost, the rod plumb, and not to agitate the contents of the cask, and especially not to insert the rod farther than is absolutely necessary in order to slip the lip under the inner side of the bung stave. When this is accomplished, the rod must be immediately withdrawn.

The line reached by the spirits in the appropriate column will indicate the wantage, or the quantity required to fill the cask.

Should the capacity of the cask gauged vary so materially from the capacities stated on the rod that it will not show the true wantage, the wantage will be found by aid of Table No. 2, herein.

This will be done by finding the capacity of the cask and the bung diameter; then finding the dry inches, or number of inches from the inside of the bung stave to the surface of the liquid in the cask, when, opposite the former two and beneath the latter in the table, will be found the number of gallons wantage.

ALLOWANCE FOR WANTAGE.

United States internal-revenue gaugers are strictly prohibited from making any allowance for wantage in casks of spirits gauged by them where no actual wantage exists.

When casks are not full, only the actual wantage, as determined by the wantage rod, will be allowed. No provision is made for reporting any fraction of a gallon as wantage except a half; but a wantage of one-half gallon is not to be allowed on original gauge at grain and molasses distilleries and at fruit distilleries having a daily spirit-producing capacity exceeding 100 gallons, except when existing to the full limit of the allowance. That is to say: where distillers do not desire to completely fill their casks or packages the ullage must be exactly one-half wine-gallon, 1 wine-gallon, 1½ wine-gallons, or 2 wine-gallons, according to the size of the package and the following regulations in that respect:

Accordingly gaugers and storekeeper gaugers will decline to weigh, gauge, mark, or stamp any package entitled to a wantage of one-half of 1 wine-gallon if the same has an ullage either greater or less than exactly one-half gal-

lon; and so on as to the higher rates of ullage allowed for larger packages, as stated below.

Upon regauge of all spirits, and upon original gauge at fruit distilleries having a daily spirit-producing capacity of not exceeding 100 gallons, a wantage of one-half wine-gallon will be allowed when the wantage approaches one-half gallon; that is, when the wantage is nearer one-half gallon than no wantage.

The same rule applies upon regauge of all spirits, and upon any gauge at such fruit distilleries, in reporting wantage greater than one-half gallon, viz, if the wantage is nearer 1 gallon than one-half gallon, it will be called 1 gallon; if three-fourths of a gallon, or nearer one-half gallon than 1 gallon, it will be called a half gallon.

Gaugers gauging for entry into distillery warehouse, at fruit distilleries whose daily spirit-producing capacity exceeds 100 proof-gallons, and at rectifying houses, will decline to brand, mark, or stamp any package of distilled spirits of a capacity less than 63 wine-gallons which has an ullage exceeding one-half of 1 wine-gallon, when the temperature of the spirits is 50 degrees Fahrenheit, or above; or an ullage of over 1 gallon, if the temperature is below 50 degrees Fahrenheit.

No package of 63 gallons capacity and upwards to 126 gallons will be branded, marked, and stamped, if the ullage exceeds 1 gallon when the temperature of the spirits is at 50 degrees Fahrenheit, or above, or if it exceeds 1½ wine-gallons when the temperature is below 50 degrees.

In packages of 126 gallons capacity and upwards, the wantage will be restricted to 2 gallons when the temperature of the spirits is at 50 degrees, or above, and to 3 gallons when the temperature of the spirits is below 50 degrees Fahrenheit.

In case, however, a final package is insufficiently filled, because the distillery cisterns or the rectifying vats are exhausted, the actual wantage thus occurring in such final

package will be marked and reported, and the fact noted on Form 59 or 59½, as the case may be.

Where an aging apparatus approved by this office is used in a distillery warehouse, if it be found to be necessary for the successful or convenient operation of the machine, and if the distiller so desires, an ullage of 1 gallon may be allowed for packages of less than 63 gallons capacity. When such ullage is allowed, gaugers will note on Form 59 as reason therefor that an aging apparatus is employed at that distillery, giving the kind of apparatus used.

HYDROMETER.

Having determined the capacity of the cask and the wantage, the next step will be to find the true temperature of the spirits by the use of the thermometer attached to the hydrometer cup, and the indication of the strength, or proof, of the spirits as shown by the hydrometer stem with a view of a correction of the volume, or wine-gallons of the spirits in the cask, as well as to determine the true per centum of the proof of the same. To find the true temperature, the hydrometer cup will be filled with spirits drawn from the center of the cask by means of a pipette or thief, and placed where no draft, fire, ice, snow, or other cause will influence it against the temperature of the spirits. When the temperature of the spirits varies from that of the surrounding atmosphere, or in case the hydrometer cup shall have been brought from an atmosphere of a different temperature from that of the spirits, the gauger will fill and empty the cup until the mercury in the thermometer ceases to move upward or downward, as the case may be, when the hydrometer stem will be immediately inserted into the spirits in the cup and the indication of the stem and of the thermometer read instantly, and as nearly simultaneously as possible.

The stem must be clean and dry, and should not be permitted to drop into the spirits by its own weight, but be

quickly and carefully immersed to the point where it will be sustained by the spirits, when the indication will be read as soon as the stem ceases to oscillate.

In reading the indication upon the stem the gauger will note the condition of the spirits immediately surrounding it, whether the collection of air-bubbles or the rising of the spirits by capillary attraction is likely to mislead in determining the true indication, and will read the first line below the general surface of the spirits. Should the stem be submerged so that the first line is considerably below the surface, and the fraction thus indicated, united to the fraction of true per cent proof shown in the Manual, make nearly a unit, the line above that thus considerably submerged will be read and reported as representing most correctly the true indication.

Gaugers are occasionally misled as to the exact position of the *first* line below the general surface of the spirits, to the detriment of the revenue. By inserting the stem in spirits contained in a glass vessel and placing the eye alternately on a level with the general surface of the spirits, looking through the glass, and then in the position usually assumed when reading the indication of the spirits while in the hydrometer cup, the gauger will be enabled to inform himself as to which particular line is to be read.

The true indication of the hydrometer and thermometer being obtained, the true per cent of proof will be found opposite the "Indication" of the hydrometer, stated in the left-hand margin, and beneath the "Temperature" or indication of the thermometer, stated in the upper margin in Table No. 5 herein.

In reading the true per cents of proof, as shown in the table, fractions of five-tenths and under will be dropped. All over five-tenths will be called a whole number.

Proof spirit, as held by the law, section 3249, United States Revised Statutes, is that alcoholic liquor which contains one-

half its volume of alcohol of a specific gravity of .7939, at 60° F., referred to water at its maximum density as unity, *i. e.*, 50 parts alcohol of the declared specific gravity, and 50 parts water. This proof will be indicated on the hydrometer at 100, when the temperature of the spirit is at 60°. When at 60° the hydrometer indicates a less per cent than 100, the spirit is said to be below proof, and the number of proof-gallons will be less than the number of wine-gallons, by the same per centum, in which case the tax is upon the wine gallon. (See section 3251, United States Revised Statutes.) When above 100, the proof-gallons will be greater than the wine-gallons by the same per centum. The scale of the United States standard hydrometer is so divided that the per cents of proof, as established by law, are shown, instead of the per cents of alcohol. A stem reads from 0 to 100, B stem from 80 to 120, C stem from 100 to 140, D stem from 130 to 170, and E stem from 160 to 200—ranging from water marked 0 to absolute alcohol marked 200.

CORRECTION OF VOLUME.

Correction of volume for temperature will be made on the entire contents of the cask. If the cask is full the correction will be made upon the capacity of the cask. If the cask is not filled the actual wantage will be subtracted before the correction is made. (See examples for correction of volume on pages 31 and 80, and also preceding Table No. 5.) The standard for measuring volume being established at 60° F., the correction for expansion or increase of volume must be made by subtracting a per centum proportioned to the rise in temperature above 60°; and the correction for contraction or decrease in volume by adding a per centum proportioned to the fall in temperature below 60°. Such per centum will be found in the right-hand column in Table No. 5 herein.

In computing correction of volume gaugers should bear in mind the fact that the decimals in the right-hand column

on each page of Table No. 5 herein represent the correction required to bring 100 gallons of spirits, at the given temperature, to its volume or quantity at the standard temperature, 60° F. Thus, "0.5 subt." indicates that the spirits at the given indication and temperature would contract 0.5, or one-half of a gallon to every 100 gallons, should the temperature of the spirits decline to 60° F.

After having deducted the actual wantage from the capacity of the cask and multiplied the apparent contents by the decimal of correction to volume, should there be a fraction of a wine-gallon in the product less than twenty-five hundredths (.25), the fraction will be dropped; if twenty five hundredths (.25), or any intermediate fraction to and including seventy-five hundredths (.75), it will be called one-half gallon; if above seventy-five hundredths (.75), it will be called a whole gallon. (See Table No. 3.) The wine-gallons thus found will be cut upon the bung stave of the cask in a legible manner. This will be done by cutting the full capacity of the cask, with the wantage immediately beneath, and under this the correction to volume, followed by the sign plus (+), if the correction is added, or minus (—), if subtracted, and in all instances the true *contents* in wine-gallons must be made to thus appear. Multiply the true wine-gallons of the contents, as cut upon the cask, by the per centum of proof (which must also be cut on the bung stave when gauging at distilleries), and the product will be the number of proof-gallons of spirit in the cask, which number will be cut upon the bung stave after the per cents of proof, retaining in this instance fractions as found to two decimal places. Where, however, the proof of the spirits is exactly 100 the number of proof-gallons need not be cut on the bung stave. In case the inspection is performed by the use of the scales the marks will be cut on the bung stave, as directed on page 79 herein.

VARIETIES OF CASKS.

Casks are classed into three varieties, as shown in figure 4 herein, and the distinction consists in the curvature of the staves at what is termed the quarter hoop; that is, at a point midway between the bung and chimb.

Those casks having the least curvature are termed the first variety, those having a medium curvature the second variety, and those having the greatest curvature the third variety.

By observing the representations (Fig. 4) it will be seen that if the three casks, whose outlines are delineated, had the same dimensions, as measured by the gauging rod, viz, the same head diameter, bung diameter, and length, the first variety cask would have a less capacity than the second variety cask, and this latter a less capacity than the third variety cask.

For the reason indicated, no fixed inflexible rule for classifying casks is practicable, and therefore gaugers must exercise their judgment and discretion in determining under which variety casks should properly be gauged. The second variety cask is the one ordinarily in use.

Where casks are gauged as the first or third variety, the variety will be cut upon the bung stave after the proof-gallons, thus, 1–V, 3–V.

EXAMPLE ILLUSTRATING THE METHOD OF DETERMINING THE NUMBER OF GALLONS IN A CASK, BY THE USE OF THE ROD.

Head diameter of cask, as shown by the head rod	18.9 inches.
Bung diameter of cask, as shown at the bottom of slide on the mean-diameter scale	21.9 inches.
Difference as shown at the bottom of the slide in the A column	3.0 inches.
Amount to be added to the head diameter to produce the mean diameter, as shown at the foot of the slide in the 2 var. or B column	1.9 inches.

Mean diameter as shown on the face of the rod adjacent to the line above the figures 1.9 in the right-hand or A column	20.8 inches.
Length as shown by the caliper measurement	28.9 inches.
Capacity of the cask, as shown in Table No. 1, in wine-gallons	42½ gallons.
Wantage	½ gallon.
Apparent wine-gallons of spirit in the cask.	42 gallons.
Indication of hydrometer	109
Temperature	79° F.
Correction of volume for temperature	0.9 subt.
Nine-tenths of one per centum of 42 gallons.	.378 gallon.
42 gallons — .378 gallon	41.622 gallons.
Correction of volume	½ gallon.
Net contents	41½ gallons.
Indication 109, temperature 79, true per cent, as shown in Table No. 5, 101. 2 to be read as	101

41½ wine-gallons multiplied by 101 per centum proof, equals 41.91 proof-gallons.

Taxable gallons	41.9

RULE FOR FINDING THE CAPACITY OF A CASK BY THE USE OF THE GAUGING ROD.

Find the mean diameter of the first variety of casks by multiplying the difference between the head diameter and the bung diameter by the decimal .55 and adding the product to the head diameter, the sum being the mean diameter; of the second variety, by multiplying the difference between the two diameters by the decimal .63 and adding the product to the head; of the third variety, by multiplying by the decimal .70 and adding the product to the head. Having thus found the mean diameter, multiply the square of the mean diameter, in inches, by the decimal .0034, which

is substantially the same as dividing by 294, being the number of cylindrical inches in a wine-gallon, and the product will be the wine-gallons in one inch in length. Multiply this by the length in inches and the product will be the capacity of the cask in wine-gallons.

RULES FOR GAUGING CISTERNS OR TUBS.

Take the dimensions in inches and tenths of inches. Add together the square of the top diameter, the square of the bottom diameter, and four times the square of the midway diameter (ascertained by adding the top and bottom diameters together and dividing by two), and divide the sum by six, which gives the square of the true mean diameter; multiply this by the height of the cistern, and the product will be the capacity in cylindrical inches. As there are 294 cylindrical inches in a gallon, divide this last product by 294, and the quotient is the number of gallons contained in the cistern.

Example.

108 inches, top diameter.
120 inches, bottom diameter.

Divided by 2) 228

114 midway diameter.
100 in height.

$108 \times 108 = 11664$
$120 \times 120 = 14400$
$114 \times 114 \times 4 = 51984$

$78048 \div 6 = 13008$

$13008 \times 100 \div 294 = 4424 +$ gallons.

Should the cistern be full, or warped so as not to be a perfect circle, or otherwise in such condition that the diameter of the bottom can not be taken, the following rule, though not mathematically correct, is for all practical

purposes sufficiently so, the difference being only shown in large cisterns, where the difference between the top and bottom diameters is considerable.

Take the outside circumference of the cistern halfway between the bottom and top, divide this by 3.1416 (or multiply by 7 and divide by 22), and you have the mean diameter on the outside; deduct from this twice the thickness of the staves, and you have the mean inside diameter. Multiply this sum by itself and by the height, and the product by .0034; the product is the capacity of the cistern in gallons.

Example (dimensions being same as in last example).—Outside circumference of cistern, 367.5 inches; height, 100 inches; staves, 1½ inches thick.

$367.5 \div 3.1416 = 117 - 3$ inches $= 114$ inches; $114 \times 114 \times 100 = 1{,}299{,}600 \times .0034 = 4{,}418$ gallons.

GAUGERS' REPORTS.

Gaugers will make their daily reports on Form 59, of spirits gauged and inspected by them, in accordance with the following instructions:

The name of the person, firm, or corporation for whom the gauging is performed, the district, the registered number of the distillery, and the date of gauge must be written at the head of the form. In case the inspection is in a special or general-bonded warehouse, the number of such warehouse will be entered at the head of the form, preceded by the letters S. B. W. or G. B. W., as the case may be.

In column 1, beneath "*Serial Number of Package*," will be stated the serial number of the cask or package as cut or burned thereon.

In column 2, beneath "*Length in Inches and Tenths*" and "*Gross Weight*," will be entered the length of the cask or package, as determined by the use of the calipers attached to the standard gauging rod.

In case, however, the spirits are weighed, the gross weight will be entered in this column.

In column 3, beneath "*Mean Diameter in Inches and Tenths*" and "*Tare*," will be stated the true mean diameter of the cask or package as found by the use of the standard gauging rod.

The tare of the cask will, however, be entered in column 3, where the inspection is by weighing.

When spirits are *regauged* with the rod for withdrawal from warehouse, the length and mean diameter of the cask need not be determined or reported unless desired by the distiller, or it is apparent there was an error in the previous gauge.

In case the dimensions of the cask are not determined, the words "Capacity not retaken" will be written in column 4 of the return on Form 59.

In column 4, beneath "*Wine-Gallons Capacity*," will be stated the total capacity of the cask.

See instructions herein, on pages 79 and 80, under the head of "Ascertainment of Capacity of Casks on Original Inspection," and on pages 90 and 91, under head of "Inspection of Spirits in Warehouse, or upon withdrawal therefrom, when in packages the capacity of which has been determined by weighing."

In column 5, beneath "*Wantage*," will be stated the actual wantage as determined by the wantage rod, applying the rules given on pages 24, 25 and 26.

In column 6, beneath "*Correction of Volume*," will be stated the actual quantity which (under the regulations) is deducted from or added to the apparent contents to give the real contents, as (for instance) "0," "½," or "1," as the case may be. (See Table No. 3 herein.)

When spirits are gauged, proper correction of volume must always be made, and any gauger whose returns show, upon examination in this office, that this has been neglected will be considered as not having performed his duty.

When spirits are weighed, the net weight will be entered in columns 5 and 6 instead of the wantage and correction of volume.

In column 7, beneath "*Indication*," will be stated the indication of the hydrometer stem.

In column 8, beneath "*Temperature*," will be stated the indication of the thermometer as read at the same time the gauger reads the indication of the hydrometer.

In column 9, "*Net Wine-Gallons Contents*," will be stated the net wine-gallons contents, which will be obtained by deducting from the wine-gallons capacity the wantage and adding to or subtracting from the remainder the proper correction of volume, according as the temperature is above or below 60° Fahrenheit, observing the instructions for the treatment of fractions of wine-gallons given herein.

Whenever the inspection is by weighing, the entry in column 9 will be determined by reference to Table No. 1 of the Gaugers' Weighing Manual.

In column 10, beneath "*Proof*," will be stated the true per cent of proof as found in Table No. 5 herein from the indications of the hydrometer and thermometer.

In column 11, beneath "*Proof-Gallons Contents*," will be stated the number of proof-gallons, found by multiplying the "net wine-gallons contents" by the true per centum of proof, observing the rule heretofore given for the treatment of fractions of per cents of proof. (See Table No. 4 herein and Table No. 1 of the Gaugers' Weighing Manual.)

Whenever the spirits are exactly 100 per cent proof, and the true number of wine-gallons and of proof-gallons can be expressed by the same figures, such figures need not be entered in column 11, "*Proof-Gallons Contents*," but in lieu thereof the words "*Same as Wine-Gallons*" will be written. Entry will, however, be made in column 11 in all instances where it appears on reinspection that the loss of spirits in warehouse is excessive, or where the spirits are above or below proof.

In column 12, beneath "*Taxable Gallons Contents*," will be entered upon gauge for entry into warehouse the proof-gallons contents, observing the rule for the treatment of fractions given below. The net wine-gallons will be entered when the spirits are below proof.

Upon gauge for withdrawal will be entered the proof-gallons contents, or the wine-gallons when the spirits are below proof, with the addition thereto of any loss in proof-gallons shown by the regauge in excess of the loss allowed by law.

In either case, in stating the taxable gallons, any fraction of a gallon less than one-tenth will be dropped.

Where the proof-gallons extended to one decimal place represent the exact taxable gallons no entry is required in column 12. In case, however, upon regauge made for withdrawal from bond a package is found to contain a larger quantity of spirits than was shown upon the previous regauge made at request of the distiller, the gauger will enter in column 12 the taxable gallons as shown by the entry gauge, and indicate by a footnote on the return the serial number of each cask thus affected, and enter opposite thereto, in each instance, the wine and proof-gallons contents as shown by the said previous regauge.

In column 13, beneath "*Tax Due*," will be stated the amount of the tax, in dollars and cents, reckoned at one dollar and ten cents per taxable gallon.

In column 14, beneath "*Kind and Serial Number of Stamp*," will be stated the serial number of the stamp on the package, and immediately beneath the printed heading of this column will be written "W. H.," "T. P.," "Ex.," "G. B. W.," or "S. B. W.," according as the stamps are warehouse, tax paid, export, general-bonded warehouse, or special-bonded warehouse.

In columns 15 and 16, beneath "*Original contents as shown by marks*," will be stated the number of wine gallons and

proof gallons found on original gauge, as shown by the marks on the casks or packages.

In column 17, beneath "*No. of Months in Warehouse*," will be written 1— if the spirits have been in warehouse less than one month, 1 if exactly one month, 1+ if more than one month and less than two months, 2 if exactly two months, 2+ if more than two and less than three months, and so on.

The last three columns on Form 59 are to be filled only when spirits are gauged on withdrawal from warehouse, in which case the column headed "*Kind and Serial Number of Stamp*" will be left blank by the gauger, and filled by the collector on issuing the stamps.

Gaugers must fill up each and every column in their reports, as directed, or write in such column the reason for the omission.

The report will be folded into a convenient size for filing, and so as to bring the indorsement in its proper place; and all of the blanks in the heading and the indorsement will be filled as indicated.

When a gauger is called upon to gauge distilled spirits for two or more distilleries upon the same day, he will report the spirits gauged for each distiller upon a separate report, and in such manner that there can be no mistaking the casks and contents gauged at each distillery. The proof and taxable gallons will be correctly footed in each report by the gauger.

Gaugers will follow the above instructions, as far as the same are applicable, in making their reports on Forms 59½, 59*a*, 122, 176, 205, and 237.

The returns (Forms 59*a*, 176, and 205) of spirits gauged or regauged, as the case may be, at distillery warehouses, which gaugers are required to deliver daily to storekeepers to be transmitted to this office with returns (Form 86), are furnished in three sizes—a small size capable of covering 25 packages, a medium size covering 75 packages, and a large size covering 175 packages.

Gaugers are directed to use these blanks in the most economical manner consistent with the requirements of the regulations of this office.

Whenever the number of packages deposited by any distiller in a distillery warehouse during a given day is 25 or less, *one* report on Form 59*a* of the small size should be used; when the number so deposited is greater than 25 and less than 76, *one* report on Form 59*a* of the medium size should be used, and when the number so deposited is greater than 75 and less than 176, *one* report on Form 59*a* of the large size should be used. Unless the number of packages so deposited on one day exceeds 175, only *one* return on Form 59*a* should be furnished to the storekeeper covering such deposits. In case, however, the number of packages so deposited exceeds 175, blanks will be used as follows:

176 to 200 packages, one large blank and one small blank.

201 to 250 packages, one large blank and one medium blank.

251 to 350 packages, two large blanks.

351 to 375 packages, two large blanks and one small blank.

376 to 425 packages, two large blanks and one medium blank.

426 to 525 packages, three large blanks.

The same rules will apply to the use of Forms 59*a*, 176, and 205, for withdrawals.

If the gauger uses two or more blanks (Forms 59*a*, 176, and 205), as the case may be, in making up his report, he will make a recapitulation on Form No. 249, and indorse thereon the serial numbers of packages of warehouse stamps, of tax-paid stamps, and of export stamps. He will inclose the reports on Forms 59*a*, 176, and 205 in the Form 249, to which they should be securely attached. If, however, two or more gaugers make reports for the same day

of the same class of transactions, the storekeeper will make the recapitulation on Form 249.

Reports on Form 249 *are* NOT *required unless two or more blanks* (*Forms* 59*a*, 176, *or* 205) *are used in making up the report for the day.*

Collectors will see that each gauger on duty at distillery warehouses and special-bonded warehouses is provided with a suitable supply of each size of each of the Forms 59*a*, 176, and 205, and of Form 249, and storekeepers on duty at bonded warehouses will see that the gaugers' reports delivered to them to be forwarded with their daily reports (Forms 86, *A* 86, and *A* 86½) are prepared in accordance with the foregoing instructions.

These instructions and limitations will also apply to the use of the Forms 59*a*, 176, and 205, at special-bonded warehouses.

REPORT ON ENTRY INTO DISTILLERY WAREHOUSE.

When spirits are gauged for entry into a distillery warehouse, the gauger will make three reports for the use of the Government, viz: Two on Form 59 and one on Form 59*a*. The Forms 59 will at once be forwarded to the collector, previous to which the gauger will mark on the back of one the words, "To the Commissioner for review," and the one thus indorsed, after the examination required below, will be forwarded by the collector to the Commissioner of Internal Revenue. The remaining Form 59 will be retained and filed by the collector.

The report on Form 59*a* will be delivered by the gauger to the storekeeper, who will transmit the same, inclosed in and attached to his daily report on Form 86, to the Commissioner. (See instructions herein under the head of "Ascertainment of Capacity of Casks on Original Inspection.")

COMPUTING TAX ON DISTILLED SPIRITS.

Section 48 of the act of August 28, 1894, provides:

That on and after the passage of this act there shall be levied and collected on all distilled spirits in bond at that time, or that have been or that may be then or thereafter produced in the United States, on which the tax is not paid before that day, a tax of one dollar and ten cents on each proof-gallon, or wine-gallon when below proof, and a proportionate tax at a like rate on all fractional parts of such proof or wine-gallon: *Provided*, That in computing the tax on any package of spirits all fractional parts of a gallon, less than one-tenth, shall be excluded.

The Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe and furnish suitable stamps denoting the payment of the internal-revenue tax imposed by this section; and until such stamps are prepared and furnished, the stamps now used to denote the payment of the internal-revenue tax on distilled spirits shall be affixed to all packages containing distilled spirits on which the tax imposed by this section is paid; and the Commissioner of Internal Revenue shall, by assessment or otherwise, cause to be collected the tax on any fractional gallon contained in each of such packages as ascertained by the original gauge, or regauge when made, before or at the time of removal of such packages from warehouse or other place of storage; and all provisions of existing laws relating to stamps denoting the payment of internal-revenue tax on distilled spirits, so far as applicable, are hereby extended to the stamps provided for in this section.

That the tax herein imposed shall be paid by the distiller of the spirits, on or before their removal from the distillery or place of storage, except in case the removal therefrom without payment of tax is authorized by law; and (upon spirits lawfully deposited in any distillery warehouse, or other bonded warehouse, established under internal-revenue laws) within eight years from the date of the original entry for deposit in any distillery warehouse, or from the date of original gauge of fruit brandy deposited in special-bonded warehouse, except in case of withdrawal therefrom without payment of tax as authorized by law.

Under the above provisions, in computing the tax on any package of spirits, officers will exclude the hundreths of a gallon less than one-tenth whenever they may arise.

Thus, 40.07 proof-gallons will be called 40 gallons for the purpose of taxation; 47.53 proof-gallons will be called 47.5 gallons, and so on.

It is of course to be understood that when spirits are below proof the tax as heretofore attaches to the wine-gallons. For example: In case of a package of spirits, when the loss is not excessive, if the contents are found to be 44.59 wine-gallons and 44.15 proof-gallons, the tax will be computed on 44.5 gallons.

Officers will ordinarily be able to mentally compute the tax under the new rate of $1.10 per gallon by simply adding one-tenth of the taxable quantity to itself. Thus, for example, if the tax is to be computed on 44.59 gallons, the computation will be 44.5+4.45=$48.95. The tax on 79.43 gallons will be 79.4+7.94=$87.34.

ALLOWANCE FOR LOSS OF SPIRITS WHILE IN WAREHOUSE.

Section 50 of the act of August 28, 1894, provides:

That the distiller of any distilled spirits deposited in any distillery warehouse, or special-bonded warehouse, or in any general-bonded warehouse established under the provisions of this act may, prior to the expiration of four years from the date of original gauge as to fruit brandy, or original entry as to all other spirits, file with the collector a notice giving a description of the packages containing the spirits, and request a regauge of the same, and thereupon the collector shall direct a gauger to regauge the spirits, and to mark upon each such package the number of gauge or wine-gallons and proof-gallons therein contained. If upon such regauging it shall appear that there has been a loss of distilled spirits from any cask or package, without the fault or negligence of the distiller thereof, taxes shall be collected only on the quantity of distilled spirits contained in such cask or package at the time of the withdrawal thereof from the distillery warehouse or other bonded warehouse: *Pro-*

vided, however, That the allowance which shall be made for such loss of spirits as aforesaid shall not exceed one proof-gallon for two months or part thereof; one and one-half gallons for three and four months; two gallons for five and six months; two and one-half gallons for seven and eight months; three gallons for nine and ten months; three and one-half gallons for eleven and twelve months; four gallons for thirteen, fourteen, and fifteen months; four and one-half gallons for sixteen, seventeen, and eighteen months; five gallons for nineteen, twenty, and twenty-one months; five and one-half gallons for twenty-two, twenty-three, and twenty-four months; six gallons for twenty-five, twenty-six, and twenty-seven months; six and one-half gallons for twenty-eight, twenty-nine, and thirty months; seven gallons for thirty-one, thirty-two, and thirty-three months; seven and one-half gallons for thirty-four, thirty-five, and thirty-six months; eight gallons for thirty-seven, thirty-eight, thirty-nine, and forty months; eight and one-half gallons for forty-one, forty-two, forty-three, and forty-four months; nine gallons for forty-five, forty-six, forty-seven, and forty-eight months; and no further allowance shall be made: *And provided further*, That in case such spirits shall remain in warehouse after the same have been regauged, the packages containing the spirits shall, at the time of withdrawal from warehouse and at such other times as the Commissioner of Internal Revenue may direct, be again regauged or inspected; and if found to contain a larger quantity than shown by the first regauge, the tax shall be collected and paid on the quantity contained in each such package as shown by the original gauge: *And provided further*, That taxes shall be collected on the quantity contained in each cask or package as shown by the original gauge, where the distiller does not request a regauge before the expiration of four years from the date of original entry or gauge: *Provided also*, That the foregoing allowance of loss shall apply only to casks or packages of a capacity of forty or more wine-gallons, and that the allowance for loss on casks or packages of less capacity than forty gallons shall not exceed one-half the amount allowed on said forty-gallon cask or package; but no allowance shall be made on casks or packages of less capacity than twenty gallons: *And provided further*, That the proof of such distilled spirits shall not in any case be computed at the time of withdrawal at less than one hundred per centum.

The maximum allowance for each of the periods named in said section 50, in the case of a cask or package of 40 or more wine-gallons capacity, may be stated in tabular form, as follows:

Not to exceed 1 proof-gallon for 2 months or part thereof.

Not to exceed 1½ proof-gallons for more than 2 months and not more than 4 months.

Not to exceed 2 proof-gallons for more than 4 months and not more than 6 months.

Not to exceed 2½ proof-gallons for more than 6 months and not more than 8 months.

Not to exceed 3 proof-gallons for more than 8 months and not more than 10 months.

Not to exceed 3½ proof-gallons for more than 10 months and not more than 12 months.

Not to exceed 4 proof-gallons for more than 12 months and not more than 15 months.

Not to exceed 4½ proof-gallons for more than 15 months and not more than 18 months.

Not to exceed 5 proof-gallons for more than 18 months and not more than 21 months.

Not to exceed 5½ proof-gallons for more than 21 months and not more than 24 months.

Not to exceed 6 proof-gallons for more than 24 months and not more than 27 months.

Not to exceed 6½ proof-gallons for more than 27 months and not more than 30 months.

Not to exceed 7 proof-gallons for more than 30 months and not more than 33 months.

Not to exceed 7½ proof-gallons for more than 33 months and not more than 36 months.

Not to exceed 8 proof-gallons for more than 36 months and not more than 40 months.

Not to exceed 8½ proof-gallons for more than 40 months and not more than 44 months.

Not to exceed 9 proof gallons for more than 44 months and not more than 48 months.

The loss to be allowed on casks or packages of less than 40 wine-gallons capacity and not less than 20 wine-gallons capacity must not exceed one-half the amount allowed on casks or packages whose capacity is 40 wine-gallons and upward, and no allowance must be made for the loss in casks or packages of less capacity than 20 wine-gallons.

It will be seen that where the loss of spirits while in warehouse does not exceed the statute limit the tax is to be collected on the proof-gallons contents, as shown by the regauge.

Where the loss exceeds the statute limit the tax will be collected on the number of proof-gallons contents, as shown by the original gauge, less only the loss allowed by law.

EXAMPLES.

1. A package, the original contents of which were 50 wine-gallons, 50 proof-gallons, and 50 taxable gallons, when regauged, after remaining in warehouse 35 months, is found to contain 45 wine-gallons and 45 proof-gallons. The taxable gallons in this case are 45, and the tax-paid stamp will represent 45 gallons.

2. A package, the original contents of which were the same as the foregoing, remaining in warehouse the same length of time, is found upon regauge to contain only 40 wine and 40.40 proof-gallons. The maximum allowance in this case is 7.50 proof-gallons. Deducting this amount from the original proof-gallons leaves 42.50 proof-gallons and 42.5 taxable gallons.

3. A package, original contents and period in warehouse same as foregoing, is found on regauge to contain 46 wine-gallons, 45.08 proof-gallons. The taxable gallons contents are 46.

4. A package, original contents 45 wine-gallons, 45.45 proof-gallons, 45.4 taxable gallons, upon regauge, after remaining in warehouse 30 + months, is found to contain 37 wine-gallons, 37.37 proof-gallons. The loss in this case being excessive, the loss allowed by law (7 gallons) being deducted from the original proof-gallons contents gives 38.45 proof-gallons, or 38.4 gallons on which the tax is to be paid.

5. A package of 38 gallons capacity, containing originally 52.50 proof-gallons, when regauged, after remaining in warehouse 3 + months, is found to contain 51.43 proof-gallons. The statute permits an allowance of only 0.75 of a proof-gallon for the loss in this case, as the capacity of the cask is less than 40 wine-gallons; therefore the tax should be paid on 51.75 proof-gallons, the taxable gallons being 51.7.

It will be observed that in cases where the loss exceeds the statute limit the proof-gallons upon which tax is due may be ascertained by deducting the maximum allowance from the actual loss and adding the remainder to the present proof-gallons contents. Thus, referring to example No. 2, above, $9.60-7.50=2.10$; $2.10+40.40=42.50$

REPORTING SPIRITS IN WAREHOUSE UPON REGAUGE AT REQUEST OF DISTILLER.

Under the provisions of section 50, above quoted, the distiller of any distilled spirits deposited in any distillery warehouse, special-bonded warehouse, or general-bonded warehouse may make due request, prior to the expiration of four years from the date of original gauge as to fruit brandy or original entry as to other spirits, to have the same regauged, and thereupon the collector shall direct a gauger to regauge the spirits and to mark upon each package the number of gauge or wine-gallons and proof-gallons therein contained. Said section further provides that taxes

shall be collected on the quantity contained in each cask or package as shown by the original gauge, where the distiller does not request a regauge before the expiration of four years from the date of original entry or gauge.

Gauging officers will, therefore, when so directed by the collector, make a careful regauge of the spirits embraced in the distiller's request and make report of the same on Form 59.

The original contents, as shown by marks, and the loss of spirits in bond will be reported, and the headings and indorsements on the returns will show that they are of "Regauge in warehouse on request."

In all cases where spirits remain in warehouse after being so regauged the report of the gauger should be filed, as to each warehouse, in the order in which the regauge was made, and Book No. 68 (to be properly designated) may be used for this purpose.

Upon the receipt of an application or entry for the withdrawal of such spirits (on payment of tax or otherwise) such application or entry will be carefully compared with the gauger's report above referred to, and all discrepancies disclosed by such comparison must be corrected before the spirits are allowed to be removed from the warehouse.

REPORTING SPIRITS ON REMOVAL FROM DISTILLERY WAREHOUSE TO GENERAL-BONDED WAREHOUSE.

When distilled spirits, made from materials other than fruit, are removed from distillery warehouse to any general-bonded warehouse under the provisions of sections 52 and 53 of the act of August 28, 1894, the gauger will, on receipt of instructions to that effect from the collector, make such examination of the spirits as is necessary to determine whether there is a noticeable discrepancy between the actual contents of each cask and the quantity shown by the marks and brands thereon.

If from said examination it appears that an excessive loss has occurred, or if the officer has reason to suspect that the packages, or their contents, have been tampered with, he will immediately make a careful and full gauge and inspection of the spirits to ascertain the deficiency or excess, and if the discrepancy is thus found to exceed that attributable to natural causes, the facts will be reported in detail, on Form 59, to the collector, who will not permit packages showing excessive loss or gain to be transferred, but instead will take the action directed in article 32 of Series 7, No. 20. Where the loss of spirits from any cask or package exceeds by 33 per cent the loss provided for in section 50 of the act of August 28, 1894, and is not less than 3 gallons, such loss will be deemed *excessive.*

After the spirits have been examined, marked, and stamped as above directed, the gauger will append to each copy of the collector's order a report on Form 352, part 2, accompanied by a detailed statement on the inside pages of that form of all packages so inspected or gauged, which detailed statement will show the quantity in each package according to the original gauge; also by another detailed statement on another set of inside pages, showing, for reference upon final withdrawal from bonded warehouse, the quantity ascertained by the regauge; the total quantity shown by this regauge will also be stated as a memorandum on Form 352, opposite the words, "As per regauge under section 50, act of August 28, 1894."

The gauger will then deliver the order bearing his report to the storekeeper after the distiller has indorsed on each copy thereof his "Entry for withdrawal, transportation, and deposit," part 3, Form 352. This entry should be indorsed in the presence of the gauger, who will in no instance allow the papers to pass out of his possession until the same are delivered to the storekeeper. Upon removal of the spirits from the warehouse the storekeeper

will indorse on each copy of the papers his "Certificate of delivery," as prescribed in article 34 of Regulations, series 7, No. 20, and the papers (together with a bill of lading, when required) will then be forwarded by that officer to the collector, or (in case of removal of the spirits to a warehouse in the *same* district, and when so directed by the collector) to the storekeeper of the warehouse to which such transfer is to be made. In case of transfer to a warehouse in the *same* district, and after the spirits have been deposited and receipted for by the storekeeper as hereinafter provided, the papers, in *duplicate*, will be returned to the collector, who will retain one copy thereof in his office, and forward one copy with his bonded account to the Commissioner of Internal Revenue, as directed in article 40 of said Regulations.

In case of transfer to a warehouse in *another* district, the papers, in *triplicate*, will be forwarded by the collector of the district from which the removal was made to the collector of the district to which the spirits are consigned, who will, after the spirits have been deposited and receipted for by the storekeeper, return one copy to the collector first named and transmit one copy with his bonded account to the Commissioner of Internal Revenue, and retain the triplicate copy in his office, as directed in article 46 of said Regulations.

ON ARRIVAL OF SPIRITS AT THE GENERAL-BONDED WAREHOUSE.

Under the provisions of section 54 of the act of August 28, 1894, when spirits removed from the distillery warehouse arrive at the general-bonded warehouse the same will be received and carefully examined by the storekeeper or storekeeper and gauger in charge, and in case there is a noticeable discrepancy between the actual contents and the quantity stated in the marks and brands on the pack-

ages, or the officer in charge has reason to believe the packages or contents have been tampered with, if a storekeeper and gauger, he will immediately make a complete gauge and inspection of the spirits to ascertain the deficiency or excess, or if a storekeeper, he will report the fact to the collector, who will detail a gauger to ascertain the deficiency or excess, which shall in either case be noted on the storekeeper's receipt (part 4, Form 352).

As the officer at the general-bonded warehouse is held responsible for the accuracy of his receipt given, in this particular, it is expected that in all cases his examination of the spirits will be sufficiently thorough to determine beyond doubt as to the actual shortage or discrepancy, if any, in case of each package received.

After the spirits have been examined or gauged, as above directed, the officer in charge of the general bonded warehouse will indorse his receipt upon each copy of the entry, part 4 of Form 352, and at once forward the same, with the accompanying papers, to the collector, to be disposed of as hereinbefore noted.

REMOVAL OF SPIRITS FROM ONE GENERAL-BONDED WAREHOUSE TO ANOTHER.

Section 55 of the act of August 28, 1894, provides that any spirits may be withdrawn once, and no more, from one general-bonded warehouse for transportation to another general-bonded warehouse, and when so withdrawn, shall have affixed thereto another general-bonded warehouse stamp, indicative of such intention; said withdrawal, transfer, etc., to be under such regulations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe.

Before the removal of the spirits the officer in charge will make such an examination of the cask and its contents as to be assured that the same have not been tampered with

and that there is neither an excess nor a deficiency of spirits. In case such examination discloses a surplus or an excessive loss of spirits to the extent hereinbefore indicated, in the case of any cask, such cask will be fully and carefully gauged and inspected.

Upon delivery of the spirits, the officer in charge will indorse on Form 352 his certificate, as prescribed in article 50 of series 7, No. 20, stating therein the shortage or discrepancy, if any, as to the packages. He will then forward Form 352 to the collector, or, if so directed by that officer, to the officer in charge of the general-bonded warehouse to which the spirits are consigned. The collector's order and permit and accompanying papers will be substantially in the same form, and will be disposed of in the same manner as provided in case of removal from distillery warehouse to general-bonded warehouse.

UPON ARRIVAL OF SPIRITS AT THE SECOND WAREHOUSE.

When the spirits are delivered to the second general-bonded warehouse, the proceedings will be the same as directed herein in case of the reception from a distillery warehouse. The officer in charge will make the same careful examination of the spirits on arrival, and determine and report any existing deficiency or excess, as in the former case.

REPORTING SPIRITS ON WITHDRAWAL FROM WAREHOUSE.

A condition of the bonds required of distillers of spirits by section 49 of the act of August 28, 1894, is for the payment of taxes at the rate imposed by said act, and before removal from warehouse and within eight years from date of original entry, or date of original gauge, as the case may be.

Section 56 of said act provides as follows:

"That the provisions of existing law in regard to the withdrawal of distilled spirits from warehouses upon pay-

ment of tax, or for exportation, or for transfer to a manufacturing warehouse, and as to the gauging, marking, branding, and stamping of the spirits upon such withdrawals, and in regard to withdrawals for the use of the United States or scientific institutions or colleges of learning, including the provisions for allowance for loss by accidental fire or other unavoidable accident, are hereby extended and made applicable to spirits deposited in general-bonded warehouses under this act."

Accordingly, when distilled spirits are withdrawn from warehouses for either of the purposes recited in said section 56, the same will be duly reported as directed under the respective headings herein.

Upon withdrawal of spirits from warehouses the same will be carefully regauged and inspected, where they may have been previously regauged in warehouse on request of the distiller.

The taxes will be collected on the quantity contained in each cask or package as shown by the original gauge where the distiller does not request a regauge before the expiration of four years from the date of original entry or gauge, or where a larger quantity is found by the final gauge than was shown by the first regauge.

In case the spirits have not been regauged in warehouse on request of the distiller, as provided herein, no regauge will be required upon withdrawal from warehouse unless upon an examination, which the gauger is expected to make, it appears that the spirits have been tampered with, in which case the spirits will be detained in warehouse, a full and complete regauge made, and the facts reported to the collector for instructions.

Regulations as to marking, stamping, and reporting spirits on withdrawal from distillery warehouse for tax payment, for transfer to general-bonded warehouse, or on transfer from one general-bonded warehouse to another, etc., will be found herein.

REPORT ON WITHDRAWAL FROM DISTILLERY WAREHOUSE.

When spirits are withdrawn from warehouse on payment of tax, the gauger, when directed by the collector, will make a careful regauge of the spirits and prepare three reports for the use of the Government, viz, two on Form 59, on one of which will be indorsed the words "To the Commissioner for review," and one on Form 176.

These forms will at once be forwarded to the collector, who, after having carefully examined the same and satisfied himself as to their accuracy, will issue the tax-paid stamps, in accordance with the provisions of law above quoted, and enter in the appropriate columns, on the said forms, the kind and serial numbers of the stamps thus issued.

It should be borne in mind in this connection that whenever upon regauge made for withdrawal from bond on payment of tax, a package is found to contain a larger quantity of spirits than shown upon the previous regauge made at the request of the distiller, the tax will be collected on the quantity contained in such package as shown by the gauge made upon entry into warehouse.

In such cases the gauger will enter the taxable gallons, as shown by the entry gauge, in column 12 on Form 59, and append an explanatory footnote to the return as directed herein on page 36.

The collector will forward to this office the Form 59 indorsed as above, and retain and file the other, and send the Form 176 to the storekeeper, who will transmit the same to this office inclosed in and attached to his daily report on Form 86.

In case of a regauge of spirits on the payment of the tax, the gauger is required to report the results of the regauge on Form 179.

In some cases all the spirits entered into a distillery warehouse on a given day may be withdrawn from the warehouse during the same day without a regauge.

In such cases, where no other spirits are withdrawn during the day, the gauger is required to deliver to the storekeeper only one report for the day, to be forwarded with Form 86 to this office, and this report will be on Form 59*a*.

In all cases where spirits are withdrawn without a regauge, the only reports of withdrawal required of the gauger are two reports on Form 59*a*, indorsed "No regauge made," one to be delivered to the collector, and the other to the storekeeper, to be transmitted to this office with his daily report on Form 86.

In making this report the gauger will use the latest edition of Form 59*a*, which has a column for the serial numbers of warehouse stamps and another column for the serial numbers of tax-paid stamps; he will enter in these columns the serial numbers of the warehouse stamps and tax-paid stamps respectively; and he will indorse these numbers on the return, and under the words (printed on the back of the form) "Gauger's return of spirits" write the words "Entered into and withdrawn from warehouse without a regauge."

Unless all the spirits entered on a given day, and only those, are withdrawn without regauge on the same day, the gauger will be required to hand the storekeeper separate reports covering entries and withdrawals respectively.

REPORTS OF GAUGE FOR EXPORTATION.

When spirits are withdrawn from distillery warehouse for exportation, each cask must be carefully gauged and inspected, and the actual wantage, proof, and contents ascertained without reference to the marks thereon. The gauger will also make three reports of the same. One report will be made in triplicate on Form 59; one copy of which he will deliver to the collector, one he will mail to the Commissioner

of Internal Revenue indorsed "For Review," and the other he will append to a copy of the report on Form 206. One report will be made on Form 205, to be delivered to the storekeeper, and by him transmitted to this office with his report on Form 86 for the day on which the withdrawal is made. The third will be made on Form 206, which latter report will be delivered to the collector. All of the blank spaces and columns on Form 206 must be filled as indicated on the form, which will be made in triplicate.

On the back of the Form 205 will be written the words "*For Export.*"

REPORTS ON CHANGE OF PACKAGES IN WAREHOUSE FOR EXPORTATION.

When a change of packages of distilled spirits is made in distillery warehouse for exportation, the gauger will carefully gauge and inspect each original package before the change is made, and make three reports of the same, as follows:

One, in detail, on Form 59, in duplicate, one copy of which will be delivered to the collector and the other forwarded to the Commissioner of Internal Revenue indorsed "For Review;" another, on Form 205, to be delivered to the storekeeper, for transmission to the Commissioner with his report on Form 86; and the third in part 3 of Form 206.

The change of package will be made in the presence of the gauger and storekeeper, who will see that no mingling of spirits of different kinds or quality or covered by different entries for deposit is permitted, and who will require the distiller, in the filling, so to arrange the contents, in gallons and fractions of gallons, that the aggregate of taxable gallons in the new packages shall just equal the number thereof in the old packages, as shown by the regauge. The taxable gallons having been legally determined by the regauge of the old packages, a different quantity should not be indicated by the new packages.

The gauger will also carefully gauge and inspect the spirits after they are transferred to the new packages, and make report of the same on Form 59, in triplicate, one copy of which will be appended to each of the three notices on Form 206.

He will also add to his statement on Form 206 a certificate, describing the new packages and their contents, and identifying such contents with those described in part 3 of that form.

REPORTS OF GAUGE ON TRANSFER OF DISTILLED SPIRITS FROM DISTILLERY WAREHOUSE TO MANUFACTURING WAREHOUSE.

When distilled spirits are withdrawn from distillery warehouse for transfer to manufacturing warehouse, the gauger, on receipt of instructions to that effect from the collector, will carefully gauge and inspect each cask of spirits, and make three reports of such gauge and inspection; one in detail on Form 59, to be delivered to the collector; one on Form 205, to be delivered to the storekeeper for transmission to this office with his Form 86 for the day on which the withdrawal is made; and the third on Form I, in triplicate. Reports on this latter form must be made in full, as indicated on the form, and the same returned to the collector. On the back of the Form 205 will be written the words "*For Transfer to Manufacturing Warehouse.*"

REPORT OF GAUGE ON WITHDRAWAL OF ALCOHOL FROM DISTILLERY WAREHOUSE FOR SCIENTIFIC PURPOSES OR FOR USE IN MANUFACTURE OF SUGAR FROM SORGHUM, OR OF ANY DISTILLED SPIRITS FOR THE USE OF THE UNITED STATES.

When alcohol or spirits are withdrawn from the distillery warehouse for either of the above purposes, the gauger, on receipt of instructions to that effect from the collector, will

carefully gauge and inspect each cask of spirits, and make two reports of such gauge and inspection, one in detail on Form 59,[1] to be delivered to the collector, and one on Form 205, to be delivered to the storekeeper for transmission to this office with his Form 86 for the day on which the withdrawal is made. On the back of the Form 205 will be written the words "*For Scientific Purposes*," or "*For use in Manufacture of Sugar from Sorghum*," as the case may be.

REPORTS OF GAUGE AT FRUIT DISTILLERIES.

Gaugers assigned to duty at fruit distilleries are required to make their daily reports on Form No. 59½ in triplicate, and to forward the same to the collector of their district, who, after examining them, will immediately forward one copy to the Commissioner. The latter will be marked on the back, in writing, "To the Commissioner for review."

The other two copies the collector will retain in his office until he has made up and is ready to forward his monthly statement of the operations of brandy distilleries on Form No. 15, when he will file one copy of all the daily reports for the month in his office, and attach one copy of the same to Form No. 15, in such manner as to prevent separation, and forward the papers together to this office.

REPORTS OF GAUGE OF GRAPE BRANDY ON REMOVAL FROM DISTILLERY TO SPECIAL-BONDED WAREHOUSE.

When brandy made from grapes is to be removed in bond from the distillery to a special-bonded warehouse, the gauger, on receipt of the collector's order to that effect, on Form 236, will carefully gauge and inspect each cask, and make report of the same on the certificate embraced in said form.

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[1] In case of removal of alcohol to be used in the manufacture of sugar from sorghum, Form 59 should be in *duplicate*, one copy of which should be mailed to the Commissioner of Internal Revenue "For Review." A report on Form 306 should also be made.

The gauger will then deliver each copy of the form to the distiller, who will immediately indorse thereon his entry of withdrawal, and at once return the papers to the gauger for immediate delivery to the collector.

In the event of neglect or refusal of the distiller to immediately return the report, with his entry, part 3, indorsed thereon, as provided, the gauger will give immediate notice of the fact to the collector, stating the date of his report on Form 236.

The order, part 1, Form 236, will be executed in duplicate in case the distillery and warehouse are in the same district, and in triplicate if they are in different districts.

REPORT OF GAUGE OF BRANDY ON WITHDRAWAL FROM SPECIAL-BONDED WAREHOUSE—TAX PAID.

When brandy, deposited in a special-bonded warehouse, is to be withdrawn upon payment of the tax, the gauger, on receipt of instructions to that effect from the collector, on Form 179, in duplicate, will carefully gauge and inspect each package and append to each copy of the collector's order a report, as indicated thereon.

Having made his certificate of inspection, as above, the gauger will deliver each copy of the order to the owner of the brandy, who will indorse thereon an entry for withdrawal, as prescribed.

In addition to the foregoing the gauger will also make reports of his regauge on Forms 59 and 176, as directed herein in case of a regauge on withdrawal from distillery warehouse on payment of tax.

If no regauge is made reports on Forms 59 and 59*a* will be rendered, and disposed of as required in case of withdrawal from distillery warehouse without regauge on payment of tax.

For instructions relative to reports of gauge of brandy withdrawn from special-bonded warehouses free of tax see pages 53 and 55 as to similar withdrawals from distillery warehouses.

REPORTS OF GAUGE OF GRAPE BRANDY ON REMOVAL FROM DISTILLERY TO FORTIFY PURE SWEET WINES.

When brandy made from grapes is to be removed under the bond, Form 256, from the distillery of a manufacturer of pure sweet wines to his winery, the gauger, on receipt of the collector's order, part 2, Form 257, will carefully gauge, mark, and stamp each cask to be so removed pursuant to the notices, parts 1 and 3, Form 257, of the distiller and wine grower. He will also affix a fortified wine stamp, properly signed and filled out by him, to each cask or package of pure sweet wine fortified under his supervision, and affix the prescribed seal and make report of the gauging of the spirits packages on Form 59½, and, as to the fortification, on part 4, Form 257, being careful to fill out the detailed statement on the inside page or pages of Form 257.

The gauger will also make a detailed statement on Form 275, to be forwarded to the Commissioner of Internal Revenue for use in the chemical laboratory.

REPORTS OF GAUGERS RELATIVE TO GRAPE BRANDY REMOVED FROM SPECIAL-BONDED WAREHOUSES TO BE USED IN FORTIFYING PURE SWEET WINES.

When brandy made from grapes is to be removed under the bond, Form 256, from a special-bonded warehouse to a winery to be used in the fortification of pure sweet wines (see act of October 1, 1890), the gauger, on receipt of the collector's order, part 2, Form 258, will at once proceed to the warehouse therein designated, and there carefully and thoroughly inspect each package, ascertaining the actual wantage, proof, and contents, without reference to the marks on the casks. The return of the gauger will be on part 3, Form 258, and will be indorsed on each copy of the order for inspection, the order for inspection being in duplicate when the warehouse and winery are in the same district, and in triplicate when they are in different districts.

A detailed statement in duplicate on Form 59 will be prepared by the gauger, one of which he will deliver to the collector and one he will mail to the Commissioner of Internal Revenue "for review." The report, part 3, Form 258, together with the order for inspection will be delivered to the party making application for withdrawal. When the brandy is withdrawn the gauger will deliver a report to the storekeeper on Form 205, to be transmitted with form A 86½ to the Commissioner of Internal Revenue.

Upon arrival of the brandy at the winery, and upon receipt of the collector's order, part 2, Form 257, the gauger will proceed to the winery as directed in the order, and there carefully and thoroughly inspect each package, ascertaining the actual wantage, proof, and contents thereof without reference to the marks thereon. He will also superintend the fortification of the wine, mark, stamp, brand, and seal the same, and make reports on part 4, Form 257, except that he will substitute the word "winery" for the word "distillery," and the words "wine producer" for the word "distiller." He will also make detailed reports on the inside page or pages of Form 257 and on Form 275.

The reports on Form 258 will be in duplicate if the warehouse and winery are in the same district, and in triplicate if they are not in the same district; Form 257 will be in duplicate in both cases.

REPORTS OF GAUGERS RELATIVE TO GRAPE BRANDY WITHDRAWN FROM SPECIAL-BONDED WAREHOUSES TO FORTIFY WINES FOR EXPORT.

When brandy made from grapes is to be removed under the bond, Form 260, from a special-bonded warehouse, to be used in the fortification of wines for export the gauger, on receipt of the collector's order in triplicate, part 2, Form 259, will at once proceed to the warehouse therein designated, and there carefully and thoroughly inspect each pack-

age, ascertaining the actual wantage, proof, and contents, without reference to the marks on the casks.

The return of the gauger will be on part 3, Form 259. A detailed statement in triplicate on Form 59 will be prepared by the gauger, one of which he will mail "To the Commissioner for review" and the other two he will deliver to the collector. The collector will retain one of these and forward the other to the officer to whom the brandy is consigned for the purpose of being used in the fortification of wine for export.

The collector to whom the brandy is consigned will issue an order to a gauger on part 8, Form 259, to gauge the brandy and the wine to be fortified, also to perform other duties as therein specified.

The gauger will make report on part 9, Form 259, and in triplicate on Form 59. He will also attach to that one of the reports on Form 59 which is to be sent to the Commissioner of Internal Revenue the pieces of the transfer stamps cut out by him pursuant to the collector's order.

REPORTS OF GAUGE AT DISTILLERIES TO BE EXAMINED BY COLLECTORS.

Collectors will cause an examination to be made of the gaugers' returns of gauging at distilleries before transmitting the same to this office, and call the attention of gaugers to such errors as are found therein.

A full and literal compliance with the regulations in this particular, extended to all returns of gauging, including Forms 59, 59½, 59*a*, 122, 176, 205, and 237 will be expected; and collectors will be held responsible for any loss to the revenue arising from any undue allowance in determining the taxable gallons under the provisions of section 50 of the act of August 28, 1894 (Sec. 3294*a*, Compilation of 1894), they being authorized to adopt any measure calculated to secure accuracy in the gaugers' returns.

As a means of insuring this accuracy, and of inciting officers to renewed diligence and vigilance, collectors will hereafter keep a record of all errors appearing on the returns of each gauging officer in the district, whether discovered on examination made either before or after transmission to this office.

This record will be made in a tabulated form, so that the standing of each officer may be readily determined, and those officers who thus appear to be most efficient and trustworthy are to be preferred in the matter of assignment to duty.

In addition, collectors are expected to recommend for dismissal any officer whose reports are habitually incorrect.

REPORTS OF GAUGE AT RECTIFIERS' BEFORE RECTIFICATION.

Gaugers are prohibited from gauging spirits for dumping for rectification until directed to do so by the collector on Form 122 revised, in duplicate, when they will make a careful gauge and inspection of each package of spirits described on the notice, render a detailed report of such gauge on the said form in the columns under the head of "Return of Spirits Gauged," and fill up and sign the certificate at the foot of the form.

Any gauger who is found to have signed the certificate in blank on Form 122, or to have given a false certificate, will be recommended for dismissal from office.

Whenever, by reason of the destruction of the portion of the stamp required to be cut out, or from other cause, the gauger erases any portion of the certificate, he will state the reason for such erasure in a footnote on the form.

In all cases gaugers will give the exact date on which they made the actual gauge.

Whenever rectified spirits are reported for dumping which contain saccharine matter or other material to such

an extent as to prevent the hydrometer from indicating the true per cent of proof, the gauger will in all cases report in column 18, on Form 122, the proof-gallons the same as the wine-gallons are returned in column 16. If in such cases no indication is shown on the stem, the spirits will be regarded as "No Proof," and a cipher ("0") will be written in column 17.

In case, however, such spirits have an apparent proof, the gauger will enter the apparent proof in column 17, preceded by letters "A. P."

Where the gauger determines the contents of the packages by weighing, he will enter the gross weight in column 9, the tare in column 10, the net weight in columns 12 and 13, and leave column 11 blank.

The gauger will exercise particular care to see that the *correct* footing of column 18 is entered at the bottom thereof. Failure to observe this requirement frequently renders an amended return necessary.

If less than the contents of a package or packages is dumped, the gauger will enter in the column "Proof-gallons' Contents" the actual quantity emptied from each package and leave the remaining columns blank, and amend the certificate correspondingly.

All tax-paid, rectifiers,' and wholesale liquor-dealers' stamps and stamps for imported spirits are now issued with a slip of paper affixed to the back of each stamp, and gaugers detailed for duty at rectifying houses will, whenever packages having thereon tax-paid stamps are gauged for the purpose of being dumped for rectification, carefully cut out with a sharp instrument that portion of the stamp upon which is shown the serial number of the stamp, name of the distiller, proof gallons, and the serial number of the package. These slips are to be securely attached to a slip of paper in such a manner as that the above-described portion of each stamp may be readily examined, and said slip

of paper must be securely attached to the Form 122, whereon the gauging is reported, and returned by the gauger to the collector, who will at once forward the same to this office.

Whenever a package of spirits bearing a rectified-spirit stamp, having a paper back, is gauged for the purpose of being dumped for rectification, that portion of the stamp on which is printed the serial number, the proof-gallons, the denomination of the stamp, and the district and State, will be carefully cut out by the gauger, in the same manner as a portion of the tax-paid stamp is cut out and attached to a slip of paper, and such slip attached to the Form 122 as above required in the case of tax-paid stamps.

Whenever package of spirits bearing a wholesale liquor dealer's stamp, having a paper back, is gauged for the purpose of being dumped for rectification, such stamp will be cut from top to bottom, between the words "proof" and "collector," which will be found near the bottom of the stamp, and the portion so cut must embrace the entire width between the said words, and the slip will be attached to the slip of paper and Form 122 as above described.

Whenever a package of spirits bearing a stamp for imported spirits is gauged for the purpose of being dumped for rectification there will be cut from said stamp that portion upon which is shown the kind and serial number of the stamp, the date of issue, the name of the dealer, the number of wine-gallons, the kind and number of the stamp on package from which the spirits were taken, the original and the present proof, and the name and district of the collector.

The gauger having gauged each package of spirits described in the notice, Form 122, and cut out the portion of the stamps required by these regulations to be attached to the notice, may leave the spirits to be emptied by the rectifier.

The gauger will return the completed notice, with the stamps attached to the duplicate, as directed, to the collector as soon as practicable.

REPORTS OF GAUGE AT RECTIFIERS' AFTER RECTIFICATION.

Under the authority conferred in section 66 of the act of August 28, 1894, it is prescribed that, until otherwise provided, all casks or packages containing 5 wine-gallons of spirits or more, filled for shipment, sale, or delivery on the premises of duly qualified rectifiers, shall be gauged, marked, and stamped by United States gaugers.

Upon completion of the process of rectification the rectifier will, therefore, give notice and make request for gauge on Form 237, revised in duplicate, stating thereon the number of packages of spirits rectified which do not contain saccharine matter, and also, as accurately as practicable, the aggregate number of wine and proof gallons contents thereof.

The rectifier will also state the number of packages of spirits rectified to which sufficient saccharine matter has been added to interfere with the correct reading of the hydrometer, and also, as nearly as possible, the wine-gallons and actual proof-gallons therein contained.

In case the spirits embraced in said notice are all of one class, the rectifier will cancel so much of the notice as refers to the other class by drawing a pen through the same.

Having thus completed the notice and signed the same, the rectifier will hand it directly to the United States gauger assigned to duty at the establishment, who thereupon will immediately ascertain from examination of Record 64, whether the rectifier has standing to his credit fully as many gallons of unstamped rectified spirits as set forth in said notice.

If it thus appears that the rectifier is entitled to have stamped the entire quantity embraced in his notice, the gauger will proceed to gauge and stamp such spirits, and make detailed report of the gauge, in the form provided on Form 237, revised, having first filled the certificate thereon as to the state of the account with the rectifier.

In case it appears from the examination above directed that the rectifier has not standing to his credit the full number of proof-gallons embraced in his notice the gauger will only gauge and stamp that quantity of spirits which the account with the rectifier, Record 64, shows him entitled to have stamped.

The gauger will enter at the foot of column 8 on Form 237, revised, the actual number of proof-gallons contained in the sweetened spirits then gauged, as stated in the rectifier's notice, and show on the "Totals" line the aggregate number of proof-gallons gauged, including the quantity thus brought down. This aggregate will thereupon be entered in the appropriate space on Record 64.

United States gaugers will not gauge or stamp spirits, after rectification, except when so requested by the rectifier on Form 237, revised, as above, when they will report each package separately, and fill all of the columns on the return, except as provided below, or state reason for the omission in the column not used.

In cases where gauging with the rod is permitted the "Wine-Gallons Capacity," "Wantage," and "Correction of Volume" will be entered in columns 1, 2, and 3, respectively.

Unless otherwise directed no entry will be required in these columns when the inspection is by weighing.

In column 4 shall be entered the "Indication" of the hydrometer stem; in column 5 the "Temperature" of the spirits, and in column 7 the true "Proof" of the spirits resulting therefrom.

In columns 6 and 8 shall be entered the "Net Wine Gallons Contents" and the "Proof Gallons Contents" of each package, respectively.

Where spirits are gauged, the proof of which can not be correctly determined by the hydrometer, owing to the presence of saccharine matter or other material which affects the instrument, the gauger will enter the apparent proof and apparent proof-gallons in columns 9 and 10 of the return, and make no entry in columns 7 and 8.

In case, however, so much saccharine or other matter has been added to the spirits that no indication is shown on the hydrometer stem, a cipher (0) will be written in columns 4, 5, 9, and 10, and columns 7 and 8 will be left blank.

In all cases, except as above, every column on the gauger's return will be filled but 9 and 10, in which no entry will be made.

Where spirits alleged to have been sweetened are returned on Form 237, revised, but which have an apparent proof exceeding 100, or which have an actual proof not exceeding 2 per cent above that indicated by the hydrometer, the entries will be the same as in case of unsweetened spirits.

In column 11 the gauger will enter the serial number of the rectifier's stamps affixed to the packages.

Upon completion of the report the gauger will forward the same, in duplicate, to the collector, who will forward one copy to the Commissioner of Internal Revenue, inclosed in the rectifier's return (Form 45) for the month.

The other copy will be held by the collector and filed with the retained copy of the return on Form 45.

Gaugers are advised of their responsibility in the control of the stamps under cover of which the trade are enabled to put spirits upon the market, and cautioned as to the necessity of knowing that in their issues they are not made accessory to the sale and transfer of illicit spirits; and

they, together with all revenue officers directly or indirectly connected with the affixing of stamps upon packages of spirits, are cautioned against affixing stamps upon packages which do not correctly represent the character of the contents, and thereby laying themselves liable to the fines and penalties of section 3316, Revised Statutes. (See instructions as to use of stamps for rectified spirits under "Stamps for distilled spirits" herein.)

RECORD 64, REVISED.

Record 64, revised, will be used at all rectifying houses by United States gaugers in recording the transactions thereat.

It is the duty of every gauger assigned to duty at a rectifying house to make in this record true and exact entry of all spirits gauged by him, as herein directed, so that he may readily determine therefrom the quantity of spirits, in proof-gallons, which the rectifier is entitled to have gauged and stamped.

The first entry in said record will be the balance standing to the rectifier's credit, as shown by the collector's account (Record 39), verified by actual inventory to be made for this especial purpose.

This entry will be made in column 6 of the record by the proper deputy collector, under whose supervision the inventory will be made, who will place the date of such entry and his signature in columns 7 and 8.

Every gauger making return of spirits gauged for rectification on Form 122 will immediately, upon completion of such gauge, enter in column 1 in this record the date of such gauge. In column 2 he will enter the aggregate of the column of "Proof-gallons contents" under "Return of spirits gauged" on said Form 122, and will write his initials in column 3.

Whenever the gauger gauges and stamps spirits after rectification, he will at once enter in column 4 of said record the date of his return, on Form 237; in column 5, the aggregate number of actual proof-gallons gauged, as shown on said form, including in such entry the actual number of proof-gallons contained in sweetened spirits, if any, and in column 6 the balance, in proof-gallons, then standing to his credit. This balance will be the difference between the number of proof-gallons of spirits gauged for rectification, as shown in column 2 of the record, and the number of proof-gallons of rectified spirits gauged and stamped, as exhibited in column 5, due allowance being made for the quantity entered as standing to rectifier's credit, on opening the record, as above provided.

Record 64, revised, will be retained at the rectifying house, and entries therein will be in ink, and gaugers will see that the same are made to date in all instances.

The collector will require the deputy collector in charge of the division to verify the accuracy of the said balance at least semimonthly, and at the same time to enter in column 7 on the record the date of verification, and in column 8 his signature. Where like verification is made by an internal-revenue agent he will also place his signature and the date in said columns 7 and 8.

If errors are made in the entries on the record they must not be erased, but will be corrected in red ink, opposite to which correction, in column 7 and 8, the deputy collector will enter the words "Correction proper," and attach his signature and the date as above.

Record 64, revised, is not intended to supersede the collector's account with the rectifier, Record 39, which latter will be kept as heretofore, and the balance thereon compared with that on Record 64, revised, at least semimonthly.

Form of Record No. 64, revised.

Returns on Form 122.			Returns on Form 237.		Balance of proof gallons.	When and by whom examined.	
Date.	No. of proof gallons.	Initials of gauger.	Date.	No. of proof gallons.		Date.	Name of officer.
1.	2.	3.	4.	5.	6.	7.	8.

Collectors will exercise such supervision over the issue of stamps for rectified spirits as to be constantly advised as to the regularity of the action of the gaugers in this regard.

COPIES OF REPORTS TO BE FURNISHED TO THE PARTY FOR WHOM GAUGING IS DONE.

In all cases where gaugers perform official gauging they will hand a copy of their official report, when so desired, to the party for whom such gauging is done.

Where it can be done without interfering with the proper discharge of their official duties, gaugers may furnish additional copies of, or extracts from, their official reports on Forms 59 and 237 only, and only upon a written request from the person desiring the same. Such application should state the number of packages to be gauged or reported, and whether an actual gauge is desired, or only an extra copy of the gauger's official report, and all such applications must be filed in the collector's office at the end of each month by the gauger.

The extra copies of reports so furnished must correspond exactly as to serial numbers of packages and stamps, proof, contents, etc., of each package, with the official report of the gauger.

For his services for such unofficial gauging and for extra copies of his official reports, the gauger may be allowed to collect from the owner of the spirits a sum not exceeding

in any case 8 cents a package for each package of spirits actually gauged, or 3 cents for each package embraced in the copy of the report furnished.

At the end of the month the gauger must file with the collector a report showing the names of the persons from whom such fees were collected, and the exact amount received from each during the month.

In making reports of unofficial gauging, or the extra copies of reports of official gauging herein contemplated, the blank forms furnished by the Department should not be used, and such copies are additional to the one copy of each official report which the gauger is required by regulations to furnish to the person for whom the gauging is done, without charge.

Reports of unofficial gauging must not be signed by gaugers in their official capacity.

GAUGERS' BILLS.

Gaugers will render their bills for fees and expenses monthly, on Form 150, revised (see instructions on pages 4–8 herein), and any failure to fully comply with the instructions found on said form in making out the bill may cause delay in its settlement.

GAUGERS' TICKLER.

Form 109 is intended solely for the use of gaugers, to transcribe from Form 59, the daily statement required for their monthly accounts—Form 150.

The tickler should neither be forwarded to the collector nor to this office.

REPORT OF WEIGHING BEAMS, INSTRUMENTS, AND LOCKS.

All internal-revenue gaugers, storekeepers and storekeeper gaugers, to whom Government weighing beams and appliances, hydrometers, locks, seals, and Gaugers' Man-

uals are intrusted, will report to the collector such property, on Form 289, revised, at the end of each month, as well as upon retirement from the service.

Such report will embrace in the proper spaces the exact number of the articles enumerated in the hands of the officer on the first of the month as shown by the previous report, the correct number received during the month, and the number actually on hand at the end of the month.

If any losses of such articles have occurred during the month, such losses must be fully and satisfactorily explained on this form in the space provided for that purpose.

Report on Form 289, revised, will be forwarded to the collector by the officer, with his monthly voucher for pay on Form 107, 107½, or 150, as the case may be, and such pay account will not receive approval until the report is properly rendered as above and all the specified articles satisfactorily accounted for thereon.

In case of an officer retiring from the service, in addition to submitting with his final pay account a report on Form 289, revised, he will be required to file with the collector a receipt showing that all Government weighing beams and appliances, hydrometers, and Gaugers' Manuals in his possession have been actually delivered to the deputy collector or other proper officer.

Collectors will hold officers to a rigid accountability in this matter and decline to approve the pay account of any officer failing to duly account for Government instruments in his possession on Form 289 or to turn the same over to the proper officer on retiring from the service.

REPORT OF STAMPS USED.

Section 3314, Revised Statutes, as amended, requires each gauger to make daily report to the collector of stamps used and for whom used.

This report will be made on Form 118, revised, and is to be sent to this office only when specially directed.

GAUGER'S INVENTORY OF STAMPS REMAINING ON HAND.

Gaugers are required at the close of the last business day of each month to inventory all stamps remaining in their possession.

This inventory will be made in duplicate on Form 178, revised, and in compliance with the instructions on the back of the form. Both copies of the inventory will be immediately forwarded to the collector.

USE OF STAMPS FOR DISTILLED SPIRITS.

Under the provisions of sections 3287, 3295, 3320, and 3330, Revised Statutes, the legislative appropriation act of August 15, 1876, the acts of March 3, 1877, March 1, 1879, October 1, 1890, and August 28, 1894, stamps for distilled spirits have been prepared and are now in use as follows:

Distillery warehouse stamps, to be used on all original packages of distilled spirits produced at registered grain and molasses distilleries (sec. 3287).

Special-bonded warehouse stamps and rewarehousing stamps, to be used on original packages of brandy deposited in special-bonded warehouses under the acts of March 3, 1877, and October 18, 1888 (secs. 3 and 5, act of March 3, 1877).

General-bonded warehouse stamps for removal of distilled spirits, made from materials other than fruit, from a distillery warehouse to a general-bonded warehouse, and general-bonded warehouse retransfer stamps for removal of spirits from a general-bonded warehouse to another general-bonded warehouse (secs. 53 and 55, act of August 28, 1894).

Export stamps to be used on packages of spirits withdrawn from warehouse for exportation in bond (sec. 3330).

Transfer stamps for grape brandy to be used in fortifying wines (sec. 45, act of October 1, 1890).

Tax-paid stamps of denominations from 10 gallons to 130 gallons, to be used on original packages of spirits of all kinds (sec. 3295).

Stamps for rectified spirits, to be used only on packages containing rectified spirits, subjected to the process of rectification as defined by section 3244, Revised Statutes (sec. 3320).

Wholesale liquor-dealers' stamps to be used upon packages filled from other packages by wholesale liquor dealers (legislative and appropriation act of August 15, 1876; also act of July 16, 1892).

Stamps for imported spirits, to be used on packages of imported distilled spirits filled for shipment, sale, or delivery on the premises of any wholesale liquor dealer (sec. 11, act of March 1, 1879).

These stamps are engraved and bound in book form, the books of tax-paid stamps containing 150 stamps each; rectified-spirit stamps, 100 each; wholesale liquor-dealers' stamps and stamps for imported spirits, 300 each; distillery, warehouse, and exportation stamps, 400 each; special stamps for warehousing and rewarehousing brandy, 300 each; general bonded warehouse and general bonded warehouse retransfer stamps, 200 each.

The tax-paid stamps are for 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, and 130 gallons, with nine coupons attached, each coupon representing 1 gallon, and also nine coupons representing one-tenth of 1 gallon each.

Rectifiers' and wholesale liquor-dealers' stamps and the stamps for imported spirits, are for 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, and 130 gallons, with four coupons, representing 1 gallon each, attached to the 5-gallon stamp, and nine coupons, representing 1 gallon each, attached to stamps of all other denominations.

All tax-paid, rectifiers', wholesale liquor-dealers' and export stamps, stamps for imported spirits, and for transfer of grape brandy are now issued with a slip of paper affixed to the back of each stamp.

Spirits produced from any material other than apples, peaches, or grapes are required to be drawn into casks or packages containing not less than ten wine-gallons each, gauged, proved, and marked, and deposited in the distillery warehouse, and to have the distillery-warehouse stamp affixed to each cask. Before being withdrawn from warehouse the tax-paid, the general-bonded warehouse, or the export stamp must also be affixed, and said stamps must remain upon such casks or packages until the spirits therein are emptied, drawn off, or exported. When emptied or drawn off, the warehouse and tax-paid stamps, with the marks and brands, must be effaced and destroyed, as required by section 3324, Revised Statutes.

The original casks or packages of a distiller, after removal from distillery warehouse, must therefore bear the distillery-warehouse and tax-paid, or warehouse and export, or warehouse and general-bonded warehouse stamps, except when alcohol has been withdrawn for scientific purposes, or any spirits for use of the United States, free of tax, as provided in sections 3297 and 3464, United States Revised Statutes.

The absence of these stamps is evidence that the tax was not paid, or that there has been a change of package, and the cask in such latter case, if containing five or more gallons wine measure, must bear the rectifiers' or the wholesale liquor-dealers' stamp, as the case may be, and be marked as hereinafter provided.

All spirits produced by distillers of apples, peaches, or grapes, exclusively, are required to be drawn into casks of not less than ten wine-gallons capacity, and to be retained at the designated place of deposit at the distillery until the

tax is paid thereon and the tax-paid stamp is attached thereto, except when removed in bond from the place of manufacture to a special-bonded warehouse without payment of tax, under the provisions of the acts of March 3, 1877, and October 18, 1888, or, as to grape brandy, except when so removed for use in the fortification of pure sweet wine under the act of October 1, 1890.

The marks, brands, and stamps must be effaced and obliterated on emptying as in the case of other distillers' packages.

Under the provisions of section 3320, Revised Statutes, as amended, every package of rectified spirits, filled for shipment, sale, or delivery, on the premises of any authorized rectifier, must be gauged, inspected, marked, and branded as hereinafter provided, and have affixed thereto the stamp for rectified spirits.

It must be understood, however, that the term rectified spirits is here used in its legal and not in the ordinary commercial signification of the term. Any person who purchases tax-paid spirits and redistills or compounds the same, or who purifies or refines such spirits by any process, is a rectifier as defined by law; and the spirits so redistilled, compounded, refined, or purified are rectified spirits, and must bear the stamps for rectified spirits. The term rectifier, as used in these regulations, includes every person who treats distilled spirits or wines by any of the processes the using of which would constitute him a rectifier, as defined by section 3244, United States Revised Statutes.

The use of the wholesale liquor-dealers' stamp upon original packages of rectified spirits put up by a rectifier is improper and must not be allowed. Where, however, there has been a constructive change of package by the removal of all of the rectifier's marks and stamps, the package may then be covered by a wholesale liquor-dealers' stamp, as provided. The term rectified spirits must not be limited

to its old commercial sense, but must be construed to cover all spirits included in the statute definition.

USE OF COUPONS ON STAMPS FOR RECTIFIED SPIRITS.

In using the coupons on rectifiers' stamps, the same rule will be followed in the treatment of fractional parts of gallons as heretofore observed; that is, if the fraction is less than .50 it is dropped, and if .50 or above it is called the unit above. Thus, if a cask contains 42.46 gallons, a 40-gallon stamp and two coupons will be used, and 42.46 written in the body of the stamp. If the fraction were .52, three coupons would be used and 42.52 written in the stamp. In case a cask contains five or more wine-gallons, and less than five proof-gallons, a five-gallon stamp without coupons will be used, and the number of proof-gallons written in the body of the stamp.

STAMPS INTRUSTED TO GAUGERS.

Section 3314, Revised Statutes, as amended, authorizes collectors to intrust to gaugers books of stamps relating to distilled spirits, other than tax-paid stamps, whenever they may deem it necessary to do so, and they may require such gaugers to give security to return or account for all such stamps. Where such books are so intrusted to a gauger, he will be required to keep the same continuously in his immediate possession, and, when not in actual use, the book must be deposited in a safe and secure place, under lock and key, to which no one shall have access at any time except himself.

Such gauger must make a daily report to the collector, on Form 118, revised, of all such stamps used by him, and for whom used.

When all the stamps contained in any book shall have been issued the collector will return the book, with all the marginal stubs therein, to this office, all the blanks in such stubs being filled, so that a perfect record of the use of the stamps detached therefrom may be preserved.

The stubs must in no case be removed from any of the books, and all unused coupons must remain attached to the marginal stubs. No coupon will be of any value when detached from the stamp or stub.

GAUGER'S CERTIFICATE OF EXAMINATION OF STUBS.

Gaugers are required to attach to each stub book of other than tax-paid stamps returned by them a certificate on Form 334, properly signed, and pasted on the inside of the cover next to the binding, to the effect that all the stubs from which stamps have been taken by them—indicating the stamps by serial numbers—have been personally examined, and that the blanks in the same are all properly filled according to law and regulations.

RESPONSIBILITY FOR ISSUING AND AFFIXING STAMPS.

Officers who are responsible for the control of stamps for distilled spirits should be extremely careful in their issues, so as not to make themselves accessory to fraud by enabling dishonest persons to place upon the market illicit spirits under cover of genuine stamps. No stamp should be issued for or affixed to any package of distilled spirits until the officer responsible therefor is satisfied that all provisions of the law relating to the same have been complied with, and that the stamp correctly represents the character of the contents. The attention of all officers having control of stamps for distilled spirits, or who are directly or indirectly connected with the affixing of the same upon packages, is called to the provisions of section 3316, Revised Statutes, which impose very heavy penalties upon revenue officers who shall issue stamps to any person, who shall affix or cancel stamps in any place or in any manner, other than as provided by law or regulations. In view of these provisions, it behooves United States internal-revenue gaugers to know that parties for whom

they stamp casks or packages are authorized to have them stamped, and that the stamp affixed and canceled by them is the one provided by law for the special spirits contained in the cask or package to which it is attached, and that it correctly represents the kind, strength, and volume of such spirits.

ALL PACKAGES CONTAINING FIVE OR MORE GALLONS OF SPIRITS TO BEAR STAMPS.

Under the present system every package containing 5 gallons or more of distilled spirits lawfully upon the market must bear a stamp or stamps of one of the classes herein described.

The absence of any stamp or brand required by law from any package of spirits containing 5 gallons or more works a forfeiture of the package and contents. (See sec. 3289, U. S. Rev. Stats.)

STAMPS, AND ACCOMPANYING BRANDS, ON PACKAGES OF DISTILLED SPIRITS MUST BE OPEN TO INSPECTION.

The stamps, marks, and brands required by law and regulations to be applied to casks and packages of distilled spirits are designed to bear witness to the legality of the spirits which they cover, and they must not be obscured in any manner, or covered by incasing the vessel bearing the same in another, but must at all times be in such condition as to admit of ready examination by revenue officers.

(For more specific instructions as to use of stamps, see regulations under that head in series 7, No. 7, revised.)

MARKING, BRANDING, AND STAMPING OF CASKS OR PACKAGES OF DISTILLED SPIRITS.

On entry into distillery warehouse.

All spirits produced by distillers who use other materials than apples, peaches, or grapes must be entered in the distillery warehouse and duly withdrawn therefrom as provided by law.

When such spirits are drawn from the receiving cisterns they must be weighed, proved, and marked, and the gauger will affix the distillery warehouse stamp, and cancel the same in the manner hereinafter directed, in the presence of the storekeeper. He will also legibly cut upon the bung stave, on the side of the bunghole nearest the "stamp head," and in the order named, the gross weight, tare, net weight, wine-gallons, proof, and proof-gallons contents, fractions of gallons being retained in all instances. Where spirits are 100 proof the number of proof-gallons need not be cut on the cask.

At the same time the gauger will cut the capacity of the cask—to be determined as indicated below—on the bung stave immediately adjacent to the bunghole and on the side thereof *opposite to the stamp head.*

ASCERTAINMENT OF CAPACITY OF CASKS ON ORIGINAL INSPECTION.

The capacity of casks must be ascertained, marked, and reported in all instances when original official inspection of spirits is made by weighing. Casks will be filled to the bunghole when weighed for the ascertainment of capacity.

The proof of the spirits in each cask or package must be determined with great care immediately preceding such weighing, and if overflow of spirits occurs during this determination, by reason of the insertion of a pipette or thief into the cask, the same will be replaced prior to weighing for capacity.

The weight of the contents of the full cask having been ascertained, fractions of the resulting wine-gallons will be treated as follows in the ascertainment of capacity: Any fraction less than 0.25 will be dropped; if 0.25, or any intermediate fraction to and including 0.75, it will be called one-half gallon; if above 0.75 to the unit it will be called a whole gallon.

Correction of volume will be applied in inverse order to apparent wine-gallons capacity, thus determined to arrive at the true capacity of the cask at 60° F. (See instructions as to "Ascertainment of the capacity of casks," in the Gaugers' Weighing Manual.)

To illustrate: If a barrel of spirits having an indication of 115 and a temperature of 93 is found, when full, to have a net weight of 348 pounds, the resulting wine-gallons at that temperature are found by the table to be 44.75, to be called 44½ under the above rule. The correction of volume is 1.6, and amounts to half a gallon in this instance. (See Table No. 3 herein.)

Applying this correction in inverse order gives the capacity of the cask as 45 gallons. In case the temperature should be below 60° F., the correction of volume should be subtracted for reason recited on page 22 of the Gaugers' Weighing Manual.

After the capacity of the cask has been ascertained the distiller will be permitted to adjust the wantage, strict compliance with the regulations in the Gaugers' Manual as to exact wantage being required; after which the contents of the cask will be determined by weighing.

This adjustment of the wantage and reweighing for the ascertainment of contents will be performed immediately after the capacity has been ascertained, and, whenever practicable, it may be done without previously removing the cask from the scales. In case a cask can not be completely filled as above indicated, because the distillery cisterns are exhausted, or by reason of any lack of spirits, the contents will be ascertained by weighing as usual, but the capacity thereof must be determined by the use of the gauging rod. All instances of this kind will be explained on the gauger's return by a footnote to the effect that the cask, mentioning its number, was insufficiently filled.

MARKING AND BRANDING THE HEAD OF THE CASK.

At the same time that the gauger cuts the marks on the bung stave, as above directed, he will also cut with a die, or burn upon the head of each cask, its serial number in figures large enough to be easily read, and the serial number of the distillery-warehouse stamp in like legible figures immediately under the serial number of the cask. The word "cask," when used alone herein, will be taken to include any package used to contain distilled spirits.

Fractions of gallons must be ascertained, marked, and reported in all cases, but the tax will be collected on the fraction of a gallon of one or more tenths, the hundredths of a gallon being excluded.

The serial number for every distillery must begin with number one (No. 1), with the first cask deposited, and no two or more casks warehoused at the same distillery may be marked with the same number.

The gauger will also mark or brand, with a die, stencil, or branding iron, on the head of the cask, in letters not less than 1 inch in length, the particular name of the spirits as known to the trade, which mark or brand will be varied to suit whatever kind is contained in the package, as "high wines," "rye," "Bourbon," or "copper-distilled" whisky, as the case may be.

He will also cut or burn[1] the date of inspection, so that the head of the cask will appear as follows:

Whenever a stamp is affixed to a cask or package of distilled spirits it must immediately be canceled. For this purpose the gauger will use a stencil plate of brass or copper, in which will be cut not less than five fine parallel waved lines, long enough to extend not less than three-quarters of an inch beyond each side of the stamp, on the wood of the cask; and the name of the gauger must be cut on one end of the plate, and his title, viz, "U. S. gauger," and district, on the other end, perpendicular to the lines.

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[1] See footnote on page 88 as to branding marks on spirit casks remaining in warehouse over six months.

GAUGING AND MARKING SPIRITS IN WAREHOUSE UPON REQUEST OF DISTILLER.

Whenever the distiller makes due request to have regauged any distilled spirits deposited in distillery warehouse, special-bonded warehouse, or general-bonded warehouse, as provided under section 50 of the act of August 28, 1894, above quoted, gauging officers, when so directed by the collector, will make a careful regauge of the spirits embraced in the distiller's request, and cut on the bung stave of each cask opposite to the stamp head, and in the order named, the gross weight as then ascertained in pounds and half pounds, the present weight of the empty cask (reference being had in this connection to the "schedule of increase in tare"), the net weight, the present actual wine-gallons thus determined, the proof of the spirits, and the proof-gallons resulting therefrom.

(For instructions as to marking the bung stave where the capacity of the package was determined and cut when originally weighed, see page 91 herein.)

In case the contents of the cask were originally determined by the use of the gauging rod, there will be cut out on the bung stave the full capacity of the cask, with the present wantage immediately beneath, and underneath this the correction of volume, followed by the sign plus (+) or minus (−) as the case may be. Following the above will be cut the present proof and proof-gallons contents, retaining the fractions of gallons to two decimal places. Where, however, the proof of the spirits is exactly 100 at time of regauge the number of proof-gallons need not be cut on the bung stave.

Said section 50 provides that taxes shall be collected on the quantity contained in each cask or package as shown by the original gauge, where the distiller does not request a regauge before the expiration of four years from the date of original entry or gauge.

MARKING AND STAMPING CASKS OF SPIRITS ON REMOVAL FROM DISTILLERY WAREHOUSE TO GENERAL-BONDED WAREHOUSE.

When distilled spirits, made from materials other than fruit, are removed from distillery warehouse to any general-bonded warehouse under the provisions of sections 52 and 53 of the act of August 28, 1894, the gauger will, on receipt of instructions to that effect from the collector, make such examination of the spirits as is necessary to determine whether there is a noticeable discrepancy between the actual contents of each cask and the quantity shown by the marks and brands thereon.

If, on such examination, it appears that an excessive loss of spirits has occurred, or if the officer has reason to suspect that the packages, or their contents, have been tampered with, he will immediately make a careful and full gauge and inspection of the spirits to ascertain the deficiency or excess, and if the discrepancy is thus found to exceed that attributable to natural causes, the facts will be reported in detail to the collector, who will not permit packages showing excessive loss or gain to be transferred, but instead will take the action directed in article 32 of series 7, No. 20. Where the loss of spirits from any cask or package exceeds by 33 per cent the loss provided for in section 50 of the act of August 28, 1894, and is not less than 3 gallons, such loss will be deemed *excessive*.

Prior to the removal from the distillery warehouse the gauger will cut or burn upon the stamp head of each cask the name of the distiller and the district. He will also affix upon the head the general-bonded warehouse stamp, cancel the same in the manner required, and legibly and durably cut or burn the number of said stamp, the number and location of the warehouse to which the spirits are to be removed, and the date of removal.

The brand which is to accompany the transfer stamp may be abridged as follows:

Withdrawn Sept. 10, 1894.
To G. B. W., 4, 7th Dist., Ky.
G. B. W. S., 478.

The general-bonded warehouse stamp and the accompanying brands will be so applied to the stamp head as to leave sufficient space thereon for the application of the tax-paid stamp and the brands accompanying the same. In case, however, this should be impracticable in any case, the general-bonded warehouse stamp and the brands pertaining to the transfer may be applied to the head opposite to the stamp head.

ON ARRIVAL OF SPIRITS AT THE GENERAL-BONDED WAREHOUSE.

Under the provisions of section 54 of the act of August 28, 1894, when spirits removed from the distillery warehouse arrive at the general-bonded warehouse the same will be received and carefully examined by the storekeeper or storekeeper and gauger in charge, and in case there is a noticeable discrepancy between the actual contents and the quantity stated in the marks and brands on the packages, or the officer in charge has reason to believe the packages or contents have been tampered with, if a storekeeper and gauger, he will immediately make a complete gauge and inspection of the spirits to ascertain the deficiency or excess, or if a storekeeper, he will report the fact to the collector, who will detail a gauger to ascertain the deficiency or excess, which shall in either case be noted on the storekeeper's receipt. (See art. 38 of series 7, No. 20.)

As the officer of the general-bonded warehouse is held responsible for the accuracy of his receipt given, in this

particular, it is expected that in all cases his examination of the spirits will be sufficiently thorough to determine beyond doubt as to the actual shortage or discrepancy, if any, in case of each package received.

REMOVAL OF SPIRITS FROM ONE GENERAL-BONDED WAREHOUSE TO ANOTHER.

Section 55 of the act of August 28, 1894, provides that any spirits may be withdrawn once, and no more, from one general-bonded warehouse for transportation to another general-bonded warehouse, and when so withdrawn shall have affixed thereto another general-bonded warehouse stamp, indicative of such intention; said withdrawal, transfer, etc., to be under such regulations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe.

Accordingly, when spirits are to be removed, as above, the officer in charge of the general-bonded warehouse from which the spirits are to be withdrawn will, upon the receipt of the proper instructions from the collector, affix to each cask to be withdrawn a stamp indicative of such intended removal, in addition to the one affixed upon removal from the distillery warehouse. He will also cancel such stamp in the manner required, and legibly and durably cut or burn on the head of the cask the date of the transfer, the number and location of the general-bonded warehouse to which the spirits are to be transferred, and the number of the rewarehousing stamp. This additional brand may be abbreviated as follows:

Transferred Sept. 10, 1894.
To G. B. W., 6, 5th Dist., Ky.
G. B. R. W. S., 445.

As in case of original transfer, the rewarehousing stamp and the accompanying brands will be so applied to the stamp

head of the cask as to leave sufficient space for the application of the tax-paid stamp and the brands pertaining thereto. If in any case this course is impracticable, the rewarehousing stamp and the brands connected therewith will be applied to the head of the cask opposite to the stamp head.

Before the removal of the spirits the officer in charge will make such an examination of the cask and its contents as to be assured that the same have not been tampered with and that there is neither an excess nor a deficiency of spirits. In case such an examination discloses a surplus or an excessive loss of spirits to the extent hereinbefore indicated, in the case of any cask, such cask will be fully and carefully gauged and inspected.

UPON ARRIVAL OF SPIRITS AT THE SECOND WAREHOUSE.

When the spirits are delivered to the second general-bonded warehouse the proceedings will be the same as directed herein in case of the reception from a distillery warehouse. The officer in charge will make the same careful examination of the spirits on arrival, and determine and report any existing deficiency or excess, as in the former case.

GAUGING, MARKING, AND STAMPING SPIRITS ON WITHDRAWAL FROM WAREHOUSE ON PAYMENT OF TAX.

A condition of the bonds required of distillers of spirits by section 49 of the act of August 28, 1894, is for the payment of taxes at the rate imposed by said act, and before removal from warehouse and within eight years from date of original entry, or date of original gauge, as the case may be.

Upon withdrawal of spirits from warehouses the same will be carefully regauged and inspected, where they have been previously regauged in warehouse on request of the distiller.

The taxes will be collected on the quantity contained in each cask or package as shown by the original gauge where the distiller does not request a regauge before the expiration of four years from the date of original entry or gauge, or when a larger quantity is found by the final gauge than was shown by the first regauge.

In case the spirits have not been regauged in warehouse on request of the distiller, as provided herein, no regauge will be required upon withdrawal from warehouse unless upon an examination, which the gauger is expected to make, it appears that the spirits have been tampered with, in which case the spirits will be detained in warehouse, a full and complete regauge made, and the facts reported to the collector for instructions.

When spirits are withdrawn from warehouse on payment of the tax, the tax-paid stamp must be affixed and canceled, and upon the head of each cask must be cut or burned the registered number of the distillery, the name of the distiller, the district and State, the date of the payment of the tax, and the number of the tax-paid stamp,[1] and the gauger will also mark on the head of the cask the number of proof-gallons contents.

The following cut illustrates the marks, brands, and stamps required to be applied to the head of the cask when

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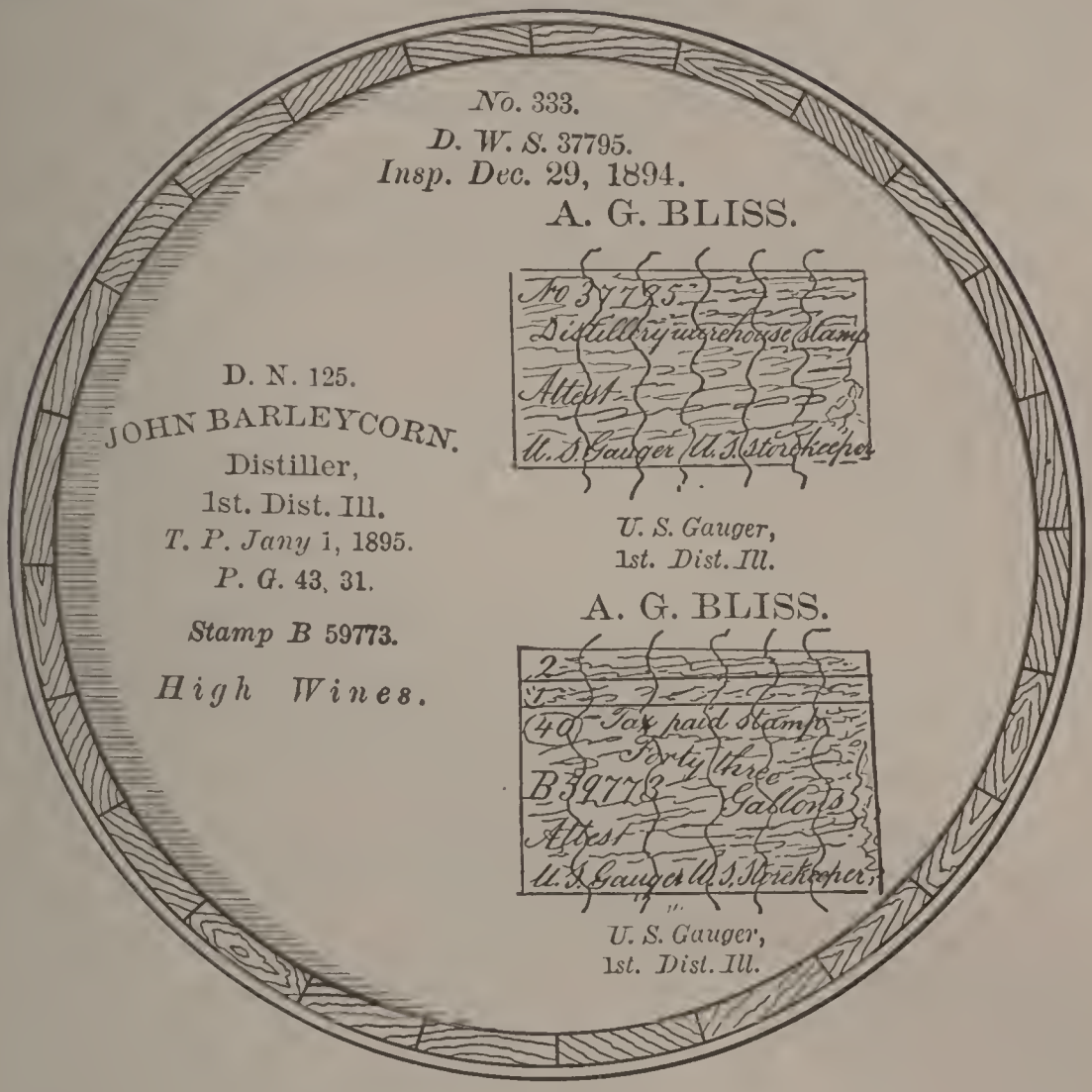
[1] The date of original inspection, the distiller's name, district, and State, and the registered number of the distillery must be burned upon the head of all distillers' packages which remain in warehouse longer than six months, and if said marks were cut at time of entry they must be burned upon removal made after the expiration of six months.

regauged on withdrawal from distillery warehouse on payment of tax:



In case a previous regauge has been made on request of the distiller and marks cut on the bung stave opposite to the stamp head, as provided herein, the marks showing the result of this second regauge will be cut on the stave to the right of the bung stave, on the side of the bunghole nearest the stamp head, in the manner directed herein under the head of "Gauging and marking spirits in warehouse upon request of distiller."

When there is no regauge, the gauger will cut or burn on the "stamp head" the number of proof-gallons as determined by the original gauge.

All of the branding required to be applied to the head, except the date, number of proof-gallons, and the number of the stamp, may be burned upon the cask prior to its being filled at the cisterns. The letters and figures constituting any brand or mark must in all cases be large enough to be easily read.

When spirits are regauged on withdrawal from warehouse, the stamp must be affixed by the gauger by whom the regauge was performed.

INSPECTION OF SPIRITS IN WAREHOUSE, OR UPON WITHDRAWAL THEREFROM, WHEN IN PACKAGES THE CAPACITY OF WHICH HAS BEEN DETERMINED BY WEIGHING.

Whenever distilled spirits deposited in any distillery warehouse, or general or special bonded warehouse, are inspected in such warehouse upon the request of the distiller, or upon withdrawal from warehouse, or at such other time as the Commissioner of Internal Revenue may direct, if the original gauge of such spirits were made on or after May 1, 1894, and the capacity of the packages containing the same were ascertained, marked upon the package, and reported as by regulations required, then, in such case, the regauge of such package may be made as follows:

The gauging officer will determine by the use of the prescribed wantage rod the ullage or wantage, if any, existing in the cask, using the utmost care to ascertain the same with precision. The wantage, if any be found, will then be deducted from the capacity of the cask or package in wine-gallons, which was determined when the cask or package was filled, and cut on the bung stave immediately adjacent to the bunghole, and on the side thereof opposite to the stamp head. The true proof of the spirits will then be taken; and to the wine-gallons remaining after the deduction of the wantage from the capacity will then be applied the proper correction of volume, if any, for that quantity

of spirits, as shown in Table 3 herein. From the net wine-gallons will then be found the proof-gallons contents.

The several items of the inspection will then be cut upon the bung stave, below the capacity, in the usual order, namely, wantage, correction of volume, proof, and proof-gallons contents, and will be returned accordingly. In columns 2 and 3 of Form 59 or 59½ the gauger will enter the words, "Capacity taken as cut on bung stave."

Gauging officers will observe the figures denoting the capacity of the cask with care, to see if the same are clearly and perfectly legible and trustworthy, or if they have any appearance of having been altered or in any manner tampered with since they were originally cut. Unless these figures are entirely satisfactory, the gauge will be made by reweighing in the prescribed manner.

The gauge will be made by reweighing also whenever the distiller requests that it be so done, or whenever the collector, for any reason, deems such course advisable.

ON WITHDRAWAL FROM A BONDED WAREHOUSE FOR EXPORTATION.

When spirits are withdrawn from a bonded warehouse and intended for export, the gauger, in addition to affixing and canceling the export stamp, will cut or burn[1] upon the head of a cask, in letters or figures not less than half an inch in length, the registered number of the distillery, the name of the distiller, the district and State in which the distillery warehouse is located, the date of withdrawal, the number of export stamp, and the name of the port or place from which the spirits are to be exported, and the number of proof-gallons contents as then ascertained will be marked on the head. The gauger will also cut on the bung stave, on the side of bunghole opposite to the "stamp head," the

[1] See footnote on page 88 as to branding marks on casks remaining in warehouse over six months.

result of the regauge in the manner directed herein under the head of "Gauging and marking spirits in warehouse upon request of distiller." Such cutting, marking, or branding on the head will be as follows:

D. N. 125.
John Smith & Co.,
Distillers,
6th Dist., O.
Withd'n Jan. 10, 1895. P. G. 44.
Ex. Stamp 385.
To New York for Export.

When the withdrawal for export is from a general or a special-bonded warehouse, the number of the warehouse and the district in which it is located will also be inserted before the description of the export stamp, as follows:

G. B. W. (or S. B. W.) 1, 1st Dist., Cal.
Ex. Stamp 385.
To New York for Export.

ON CHANGE OF PACKAGES IN WAREHOUSE FOR EXPORTATION.

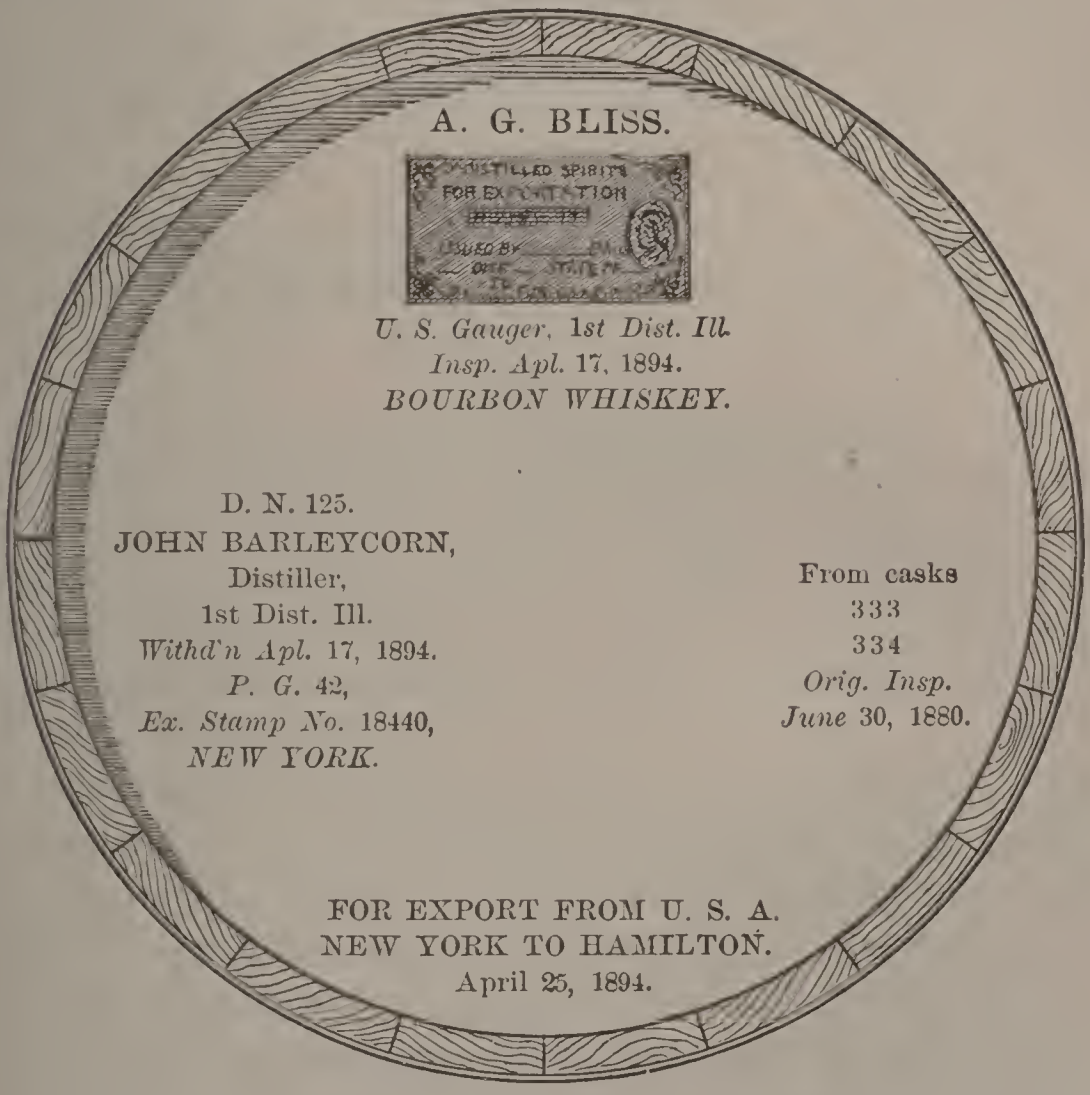
When a change of packages of distilled spirits is made in bonded warehouse for exportation, the gauger will affix the export stamp to the head of each of the new casks, and cancel the same.

He will also legibly and durably cut or burn on the head of each cask, in letters and figures not less than one-half inch in length, the date of inspection, and mark the kind of spirits as known to the trade, the date of withdrawal, the number of the export stamp, and the port to which the spirits are to be shipped for export.

There shall also be cut or burned on the head of the cask, at or before the time of filling thereof, the registered number of the distillery, the name of the distiller, and the district and State where such spirits were produced.

The gauger will also cut upon the bung stave of the cask the result of the regauge in the manner directed herein under the head of "Gauging and marking spirits in warehouse upon request of distiller," and on the head the number of proof-gallons, and also the words "From cask" and the figures denoting the serial number of the cask from which the contents of the new cask were obtained, and the date of its original inspection.

The following cut illustrates the marks, brands, and stamp to be applied to the head of the new cask when change of packages is made for exportation:



In case the new package is filled from two or more old packages, the serial numbers will be placed beneath the words "From casks," and beneath each other in the order

in which the old packages contributed in quantity of spirits to the filling of the new package, so that the first serial number will be taken from the old package which furnished the largest quantity of spirits to the new package. The second number will represent the package contributing the second largest quantity of spirits, and so on.

In case the change is made in a general or a special-bonded warehouse the designation of the warehouse by number and district will also be given, abbreviations as in the following example being used, viz: "G. B. W. (or S. B. W.) 1, 1st Cal."

That portion of the brand at the foot of the above diagram commencing "For export" is to be applied by the customs gauger at the port of entry. (See articles 53 to 64 of Series 7, No. 4, revised.)

ON WITHDRAWAL OF DISTILLED SPIRITS FROM BONDED WAREHOUSE FOR TRANSFER TO MANUFACTURING WAREHOUSE.

When distilled spirits are withdrawn from bonded warehouse for transfer to manufacturing warehouse under the provisions of section 20, act of March 1, 1879, as amended by act of May 28, 1880, in addition to affixing the export stamp, the gauger will cut with a die, or burn upon each cask,[1] in letters and figures not less than half an inch in length, the registered number of the distillery, the name of the distiller, the district, the date of the withdrawal, the number of the export stamp, and the name of the port to which the spirits are consigned for deposit in a manufacturing warehouse; and the number of proof-gallons contents, as then ascertained, must be marked on the head and cut on the bung stave, on the side of the bunghole opposite to the stamp head.

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[1] See footnote on page 88 as to branding marks on casks of spirits remaining in warehouse over six months.

The brand may be abridged in the following manner:

D. N. 125.
John Smith & Co.,
Distillers,
6th Dist., O.
Withd'n Jan. 10, 1895. P. G. 44.
Ex. Stamp 385.
To New York for deposit in M'f'g W. H.

When the withdrawal is from a general or a special-bonded warehouse the number and district of the warehouse should be given in the brand.

The brand may be abridged as follows:

D. N. 125.
John Smith & Co.,
Distillers,
6th Dist., O.
Withd'n Jan. 10, 1895. P. G. 44.
G. B. W. (or S. B. W.) 1, 1st Dist., Cal.
Ex. Stamp 385.
To New York for deposit in M'f'g W. H.

ON WITHDRAWAL OF ALCOHOL FROM BONDED WAREHOUSE FOR SCIENTIFIC PURPOSES OR OF ANY DISTILLED SPIRITS FOR USE IN THE MANUFACTURE OF SUGAR FROM SORGHUM, OR FOR THE USE OF THE UNITED STATES, FREE OF TAX.

When alcohol is withdrawn from a distillery warehouse or general-bonded warehouse for scientific purposes under the provisions of section 3297, Revised Statutes, or when any distilled spirits are withdrawn from a bonded warehouse for the use of the United States under section 3464, or for use in the manufacture of sugar from sorghum under the act of March 3, 1891, the gauger, in addition to marking, cutting, and branding the marks usually required on withdrawal of spirits from warehouse, will legibly and

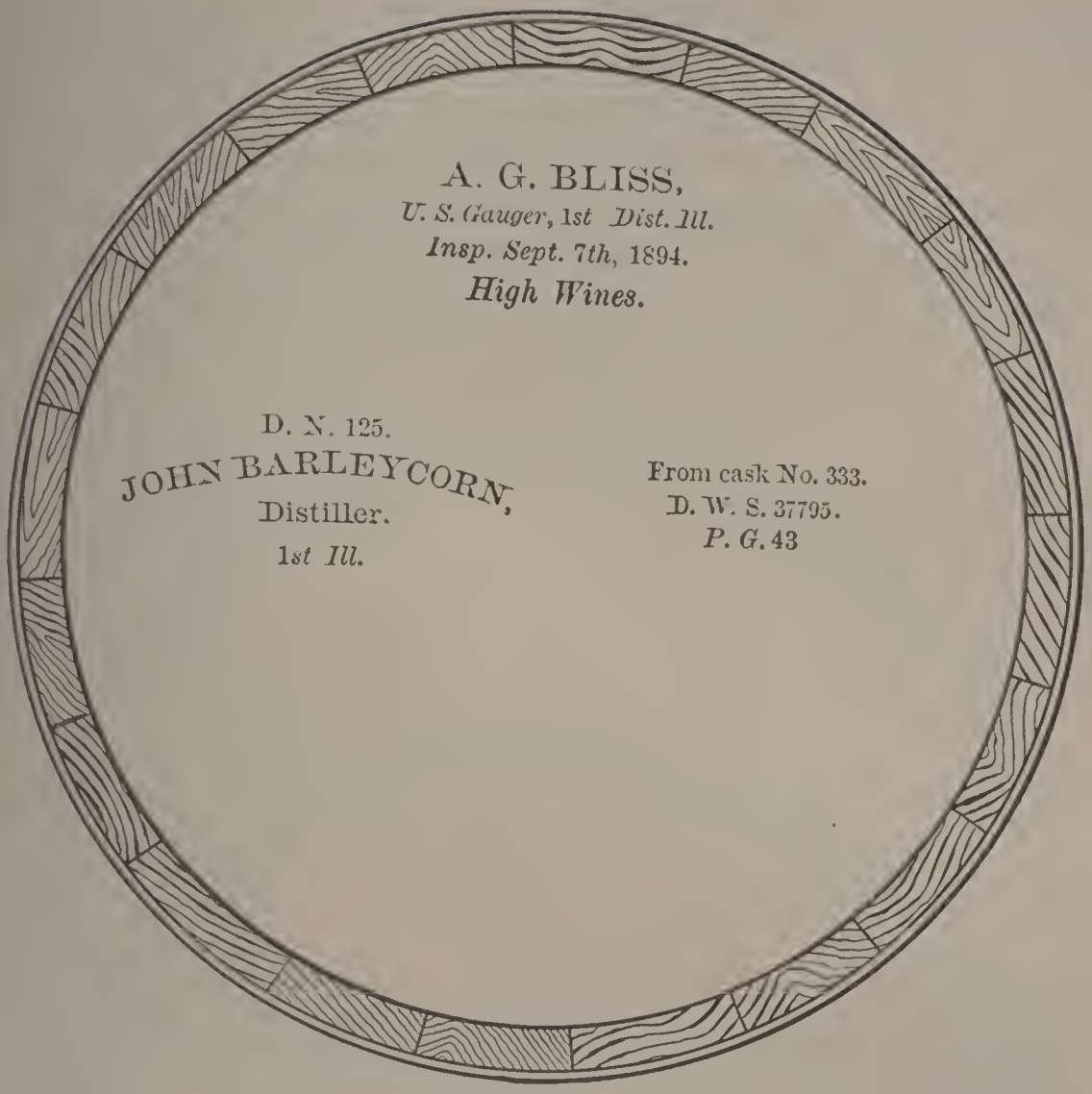
durably mark on the head of each cask, in letters and figures not less than half an inch in length, the number of proof gallons as then ascertained, the date of the permit granted by the Secretary of the Treasury for such withdrawal, the object for which the withdrawal is made, and his name, title, and district.

Such additional marking will be as follows:

Withdrawn under permit issued June 1, 1894,
For Scientific Purposes
or (For use of U. S.) (or "For Sorg. Sug.
Man'f'g permit No. —.") P. G. 44.
Richard Roe,
U. S. Gauger,
5th Dist., Ill.

ON CHANGE OF PACKAGE IN DISTILLERY WAREHOUSE OR GENERAL OR SPECIAL BONDED WAREHOUSE TO PREVENT LEAKAGE.

When it becomes necessary, in order to prevent leakage or wastage, to change a package in a bonded warehouse, i. e., to draw off the contents of a cask bearing the distillery warehouse stamp and the accompanying marks and brands, and to place the same in a new cask, the spirits must be again inspected and gauged, the number of wine and proof gallons must be cut upon the bung stave, and the gauger will legibly mark, in a durable manner, upon the head of the cask, his name, office, district, and name of the spirits as known to the trade. At the same time he will cut or burn on the head of the cask the name of the distiller, the registered number of the distillery where such spirits were produced, the date of original inspection, and the serial number of the original package, together with the serial number of the warehouse stamp, and directly beneath this latter the number of proof-gallons originally contained in the cask, so that the head of the cask will appear as shown in the following illustration:



FRUIT BRANDY.

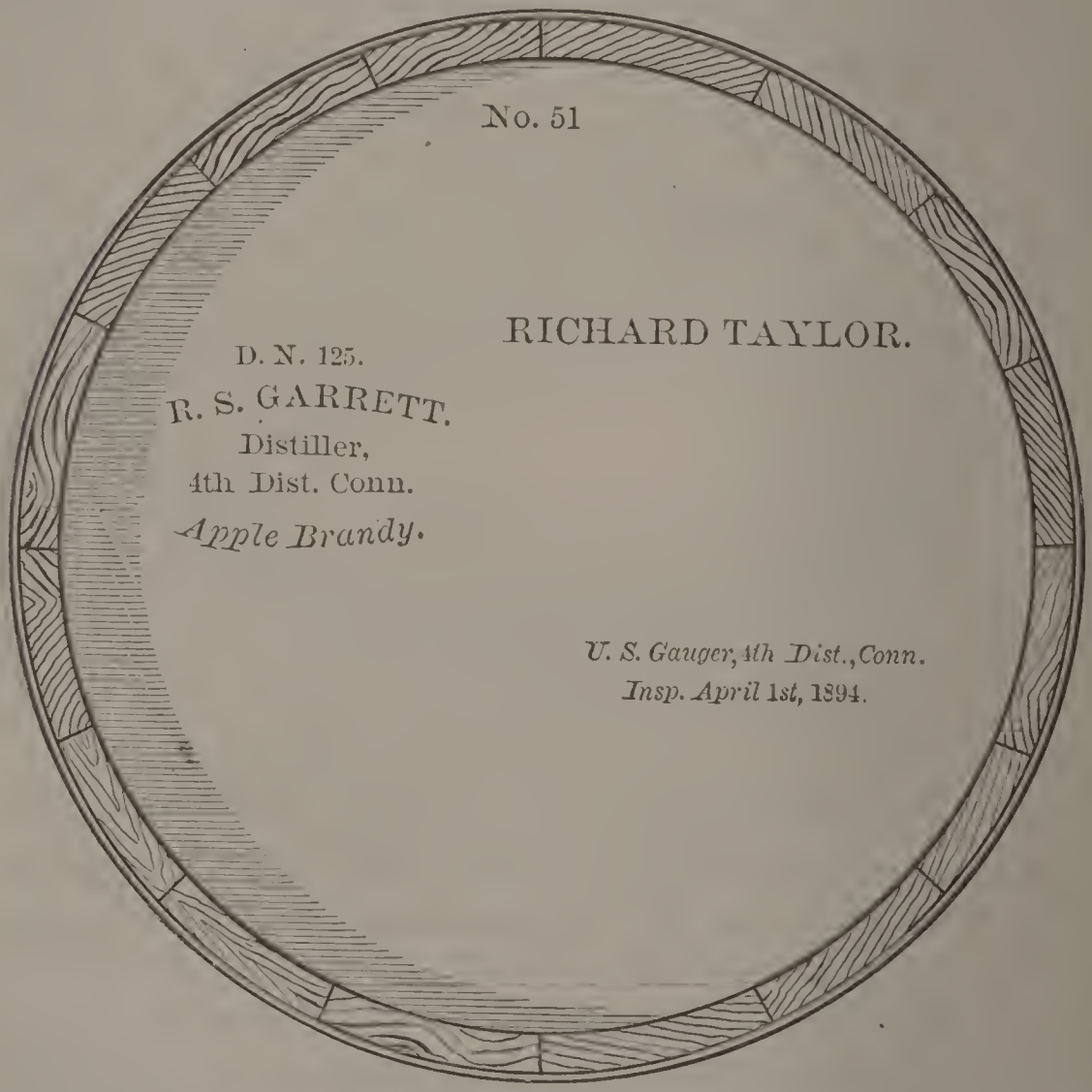
MARKING, BRANDING, AND STAMPING AT DISTILLERIES.

On gauging fruit brandy the gauger will cut upon the bung stave in the manner hereinbefore directed the number of wine-gallons, the proof, and number of proof-gallons of spirits contained in each cask,[1] and upon the head of the cask will be cut or burned the registered number of the distillery, the name of the distiller, the district, the date of inspection, and the serial number of the cask. The

[1]In all instances when the ascertainment of the contents of casks containing fruit brandy is required to be performed by weighing, the marks will be cut on the bung stave as directed herein, under the head of "On entry into distillery warehouse."

particular name of the spirits must be marked or branded upon the head of the cask.

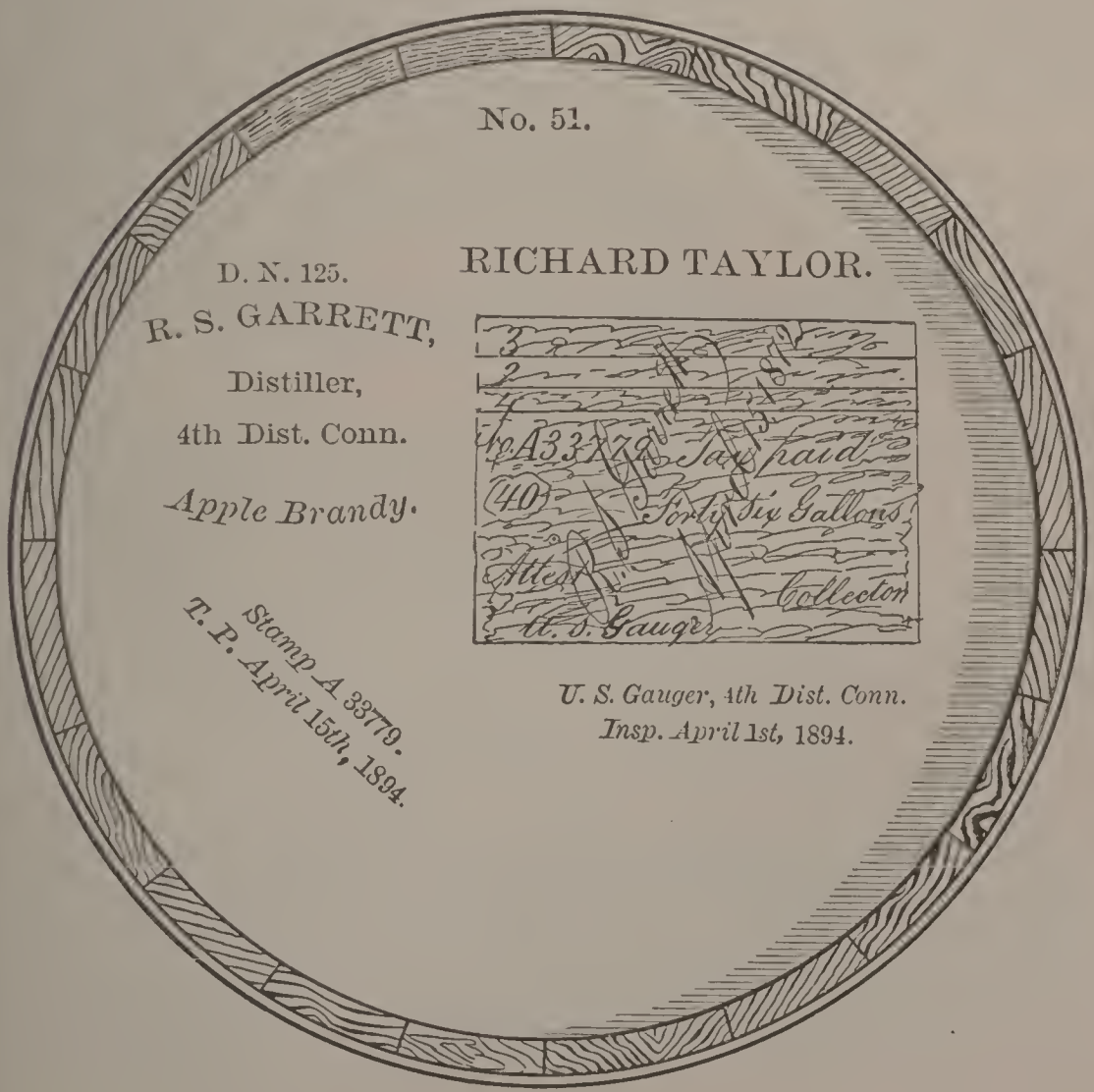
The gauger will also legibly and durably mark on the head of each cask his name, office, and district, which marking must be performed in such manner as to admit of the attaching of the tax-paid stamp between the name and office. This marking and branding upon the head of the cask will be done as follows:



Upon the receipt from the collector by the distiller of the tax-paid stamps for the packages of brandy previously gauged, marked, and branded by the gauger, the distiller shall affix the same upon the head of each package in a secure and permanent manner by pasting the same upon the head of the casks, in the space between the name and

office of the gauger, and by driving tacks—one in each corner and one in the middle of each of the four sides of the stamp—making not less than eight in number; and shall cancel the same by writing across the face of the stamp his name and the date upon which the stamp is affixed, and varnish the stamp with a transparent varnish, so as to protect it from removal or damage by exposure; and shall cut or burn in legible figures upon the head of each cask the serial number of the stamp attached thereto and the date of the payment of the tax. In attaching the stamps the distiller must be careful to attach each stamp to the cask, the serial number of which is given in the stamp.

The marking, branding, and stamping to be as follows:



ON REMOVAL OF FRUIT BRANDY FROM DISTILLERY TO SPECIAL-BONDED WAREHOUSE.

When brandy made from apples, peaches, or grapes is gauged for removal in bond from the distillery to a special-bonded warehouse the gauger will cut on the bung stave of each cask, on the side of the bunghole nearest the stamp head, the number of wine-gallons, the proof, and the number of proof-gallons of spirits contained therein. In case, however, the gallons contents are required to be determined by weighing, the result will be cut on the bung stave as directed herein, under the head of "On entry into distillery warehouse."

He will also cut with a die, or burn upon the head of each cask, its serial number, the registered number of the distillery, the name of the distiller, the district, the date of removal, the number of proof-gallons, the number of the special-bonded warehouse stamp, and the designation of the warehouse to which the grape brandy is to be removed, and mark or brand thereon the name of the spirits as known to the trade.

This brand may be abridged as follows:

No. 53.
[1] Grape Brandy.
D. N. 96.
R. S. Garrett, Distiller,
1st Dist., Cal.
Withd'n Apr. 10, 1894. P. G. 44.
S. B. W. S. 385.
To S. B. W. 5, 1st Dist., Cal.

The gauger will affix and cancel the special-bonded warehouse stamp in the same manner as distillery warehouse stamps are affixed and canceled.

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[1] Or "Apple" or "Peach," as the case may be.

The letters and figures, branded or cut as above specified, are to be in no case less than half an inch in length.

REMOVAL OF FRUIT BRANDY FROM ONE SPECIAL-BONDED WAREHOUSE TO ANOTHER.

When fruit brandy is removed from one special-bonded warehouse to another no additional gauging is required, unless a noticeable deficiency is observed. A stamp indicative of such intended removal, in addition to the one affixed upon removal from a distillery, is required to be affixed to each package and canceled by the officer in charge before the withdrawal from warehouse. The storekeeper will also add to the brand on the head of each cask words and figures indicating the date of the transfer, the number of the warehouse to which transferred, and the number of the rewarehousing stamp affixed. This additional brand may be abbreviated as follows:

Transf. June 10, 1894, S. B. R. W. S., 445, to S. B. W., 6, 1st dist., Cal.

ON WITHDRAWAL OF FRUIT BRANDY FROM SPECIAL-BONDED WAREHOUSE, TAX PAID.

When a cask or package of brandy produced from apples, peaches, or grapes is withdrawn from special-bonded warehouse upon payment of the tax on the contents, as shown by the original gauge, the gauger on duty at the warehouse shall, in the presence of the storekeeper, and before the cask or package has left the warehouse, place upon the head thereof, in such manner as to cover no portion of any brand or mark prescribed by law already placed thereon, the tax-paid stamp, indicating the payment of the tax on the spirits in the cask or package, as shown by the original gauge at the distillery; and at the time of affixing the tax-paid stamp the gauger shall, in the presence of the storekeeper, cut or burn upon the cask or package the

date of the payment of the tax and the number of the stamp. This brand may be abridged in the following manner:

T. P. Dec. 5, 1894. Stamp, 79976.

The letters and figures constituting this brand or mark must not be less than half an inch in length. The stamp will be canceled in the same manner as tax-paid stamps affixed to packages withdrawn from distillery warehouse are canceled.

When fruit brandy is withdrawn from special-bonded warehouse upon payment of the tax under a regauge, in accordance with the provisions of section 50 of the act of August 28, 1894, the gauger will cut on the bung stave of each cask, on the side of the bunghole opposite to the stamp head, the number of wine-gallons, the proof, and the number of proof-gallons contents found by the regauge. He will also affix and cancel the tax-paid stamp and cut or burn on the head of the cask the number of the tax-paid stamp, the date of the payment of the tax, and the wine and proof-gallons contents as then ascertained. (For instructions regarding the marking, branding, and stamping of fruit brandy on withdrawal from special-bonded warehouse for exportation, for transfer to manufacturing warehouse, or for the use of the United States, see regulations relative to withdrawals from special-bonded warehouses on pages 91, 94, and 95, herein.)

ON REMOVAL OF GRAPE BRANDY FROM DISTILLERY TO WINERY.

When grape brandy is gauged for removal in bond from the distillery to the winery of the distiller to be used in the preparation of pure sweet wines, the gauger will cut on the bung stave of each cask on the side of the bunghole nearest the stamp head the number of wine-gallons, the

proof, and the number of proof-gallons contained therein, or the result of the weighing, as the case may be.

He will also cut with a die, or burn upon the head of each cask, its serial number, the registered number of the distillery, the name of the distiller, the district, the date of removal, the number of proof-gallons, the number of the transfer stamp, and the designation of the winery to which the grape brandy is to be removed, and mark or brand thereon the name of the spirits as known to the trade.

The letters and figures branded or cut on the packages must in no case be less than half an inch in length, and may be abbreviated as follows:

No. 53.
Grape Brandy.
D. N. 96.
R. S. Garrett, Distiller,
1st Dist., Cal.
Withd'n Apr. 10, 1894. P. G. 44.
T. S. 385.
To W., 5, 1st Dist., Cal.

In the above brand the letters and figures "T. S. 385" signify "Transfer Stamp No. 385," and the letters and figures "W., 5" on the last line signify "Winery No. 5," the same being the winery in which the brandy is to be used in the fortification of wine.

The gauger will affix and cancel the transfer stamp in the same manner that distillery-warehouse stamps are affixed and canceled.

The gauger will then proceed to the premises constituting the winery designated in said notice or notices, and will gauge and superintend the fortification of the pure sweet wines as specified therein.

The gauger will fill out the fortified sweet-wine stamp and the stub thereof, and will affix and cancel the stamp

as directed in the collector's order, part 2, Form 257. The stamp will be affixed to the head of the cask or package, about 2 inches below the bung stave, except in the case of standing tank, when the stamp will be affixed near the aperture through which the wine is to be withdrawn.

When the wine maker desires to have the wine shipped under the Government stamp the gauger will also cut upon the bung stave, near the bung, the following letters and figures, indicating the saccharine strength and the alcoholic strength of the wine before the addition of the grape brandy, also the quantity of alcohol added as follows: S. 4,—O. A. 14,—A. A., 10, which signifies, saccharine strength, 4 per cent; original alcoholic strength, 14 per cent; and added alcohol, 10 per cent.

ON REMOVAL OF GRAPE BRANDY FROM A SPECIAL-BONDED WAREHOUSE TO WINERY.

Before removal of the spirits from the warehouse the gauger will at once affix the transfer stamps to the packages and cancel the same, and he will cut with a die or burn upon each cask the registered number of the distillery, the name of the distiller, the district, the date of withdrawal, the number of proof-gallons then ascertained, the number of the transfer stamp, and name of the place to which the spirits are to be transported.

This brand may be abridged in the following manner:

D. N. 96.
John Smith & Co.,
Distillers,
1st Dist., Cal.
Withd'n Jan. 10, 1895. P. G. 44.
Transfer stamp, 385.
To Los Angeles for fortifying wine.

The letters and figures branded or cut as above specified are to be in no case less than half an inch in length.

The foregoing instructions as to affixing at the winery the fortified wine stamps and the marks on packages of sweet wine fortified with brandy transferred from the distillery to the winery apply also to packages of sweet wine fortified with brandy transferred to the winery from a special-bonded warehouse.

ON REMOVAL OF GRAPE BRANDY FROM A SPECIAL-BONDED WAREHOUSE TO BE USED IN FORTIFYING WINE FOR EXPORT.

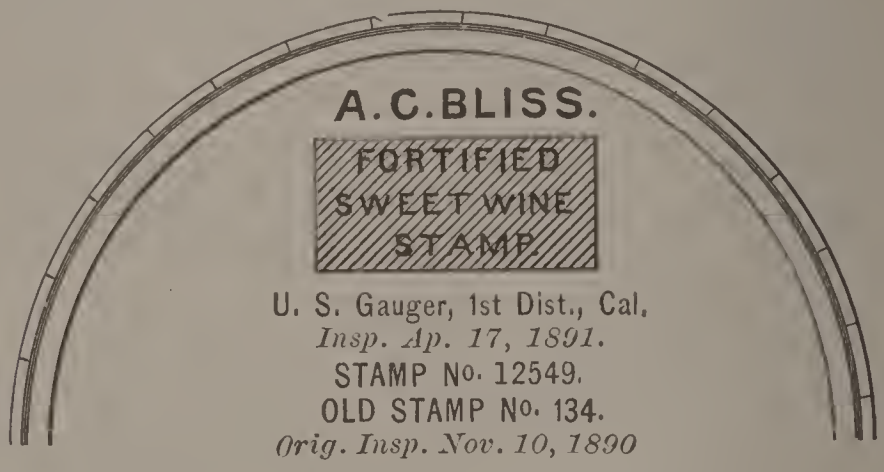
The gauger will gauge, mark, and brand each package, and affix the transfer stamp, as in case of a transfer from a special-bonded warehouse to a winery, except that the brand will show that the brandy is to be transferred to a certain point (usually a port of entry) for export.
The brand may be abridged as follows:

No. 53.
D. N. 96.
Grape Brandy.
R. S. Garrett, Distiller
1st Dist., Cal.
Withd'n Apr. 10, 1895. P. G. 44.
T. S. 385.
To New York for export.

The gauger who receives the order, part 8, Form 259, after witnessing the fortification of the wine and the destruction of the marks on each package of brandy and the portions of the transfer stamps other than the pieces he has cut out, as required by the regulations, will, to each package of the fortified wine, affix and cancel the fortified wine stamp for exportation.

ON CHANGE OF PACKAGES AT WINERY.

When a change of packages of fortified pure sweet wine is made at the winery, the gauger will affix the fortified sweet-wine stamp to the head of the new package and cancel the same.



He will also legibly and durably mark on the head of each new package, in letters and figures not less than one-half inch in length, the date of inspection, the number of the fortified sweet-wine stamp on the old package, and the date of inspection thereof. These marks may be abbreviated, as shown above.

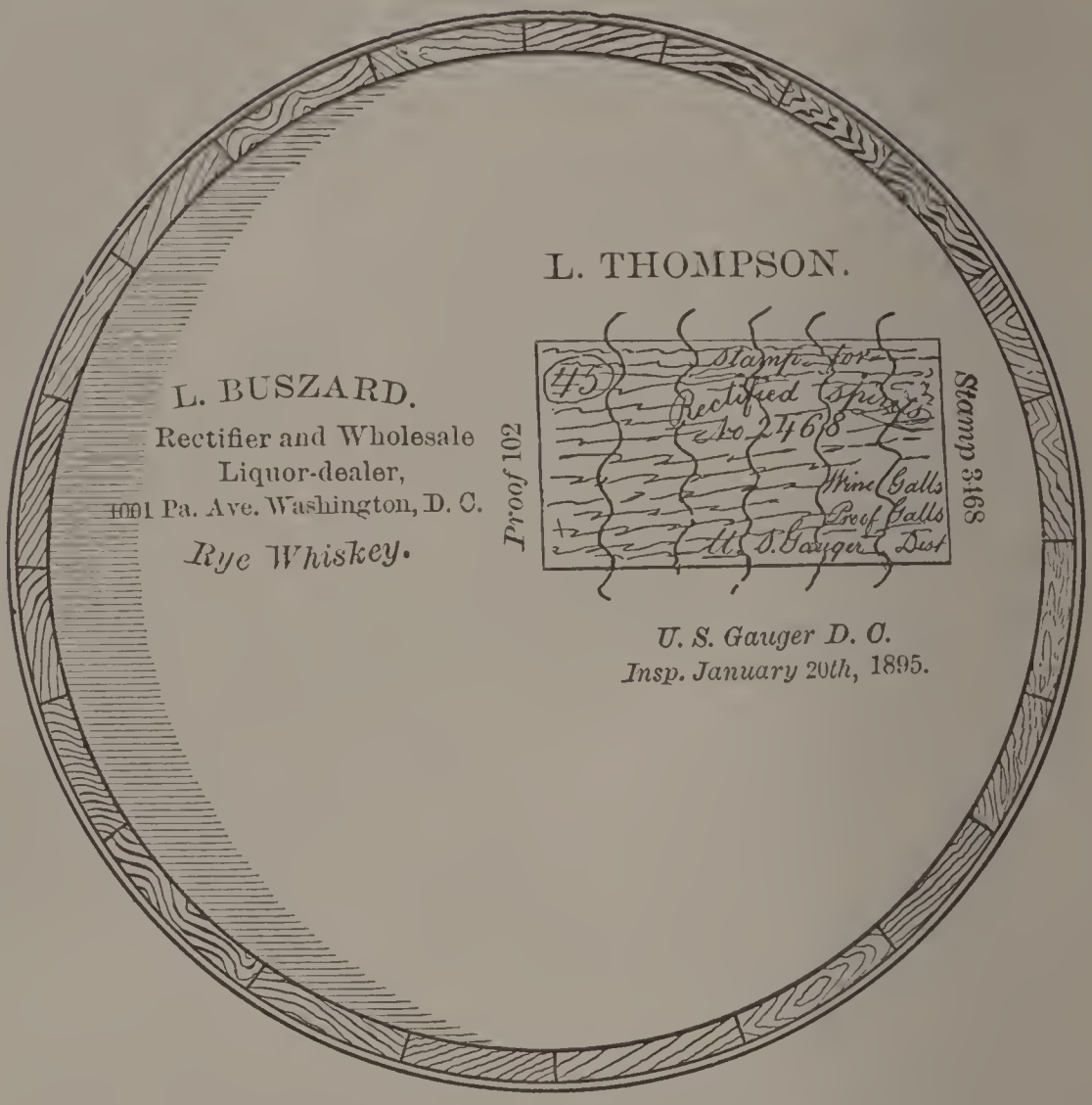
GAUGING, MARKING, AND STAMPING SPIRITS AFTER RECTIFICATION.

Under the authority conferred in section 66, act of August 28, 1894, it is prescribed that, until otherwise provided, all casks or packages containing 5 wine-gallons of spirits or more, filled for shipment, sale, or delivery on the premises of duly qualified rectifiers shall be gauged, marked, and stamped by United States gaugers. Accordingly, spirits subjected to any of the processes of rectification must be put up in casks, inspected, gauged, and stamped by a United States gauger, who will observe the requirements in this particular, as set forth herein under

the heading "Reports of gauge at rectifiers' after rectification" on page 64 herein. In addition to the attaching the stamp for rectified spirits and canceling the same, the gauger will cut upon the bung stave the result of the inspection in the manner directed herein under the head of "Gauging and marking spirits in warehouse upon request of distiller," and mark upon the head of each cask, with a stencil plate, in durable ink, his name and office, the date of inspection, the particular name of such spirits as known to the trade, the proof, the name and place of business of the rectifier, and the serial number of the stamp for rectified spirits affixed thereto. Where rectified spirits are gauged, the proof of which can not be correctly determined by reason of the addition of saccharine or other matter, but which the hydrometer stem shows to have an apparent proof, the apparent proof will be marked on the head of the casks, preceded by the letters "A. P.," and the wine-gallons only will be cut on the bung stave in the usual manner. The letter "A" will be written on the stamp before the words "Proof-gallons," and the apparent proof-gallons will be entered in the appropriate space.

When spirits are gauged which contain so much saccharine or other material that no indication is shown on the hydrometer stem, the gauger will mark the cask or package "No proof," and report the wine-gallons only. This will be done by cutting an "O" where the true per cent of proof would otherwise appear upon the cask, by writing the wine-gallons upon the stamp and the word "No" before the words "Proof-gallons," and striking out the word "gallons," so that it will read "No proof."

This mark or brand may be substantially as follows:



So much of the above marks as indicate the name and place of business of the rectifier, and the particular name of the spirits as known to the trade, may be applied by the rectifier either before or after the casks are filled, in which case, if upon gauging the spirits the gauger finds that the marks thus applied do not correctly represent the facts, he shall cause immediate correction. The above brands or marks will be understood to represent that the package is a rectifier's original package, and that the spirits contained therein were rectified, refined, purified, redistilled, or compounded and put up by the party named as a rectifier, and at the place stated in such brands or marks.

WHOLESALE LIQUOR DEALERS.

Under the provisions of the legislative, executive, and judicial appropriation act, approved August 15, 1876, the services of gaugers at wholesale liquor dealers' establishments, for the purpose of gauging, marking, and stamping wholesale liquor dealers' packages, are not now required, except when special instructions to that effect are issued.

Under the provisions of section 3323, Revised Statutes, as amended by the legislative, executive, and judicial appropriation act of June 16, 1892, wholesale liquor dealers are required to mark, brand, and stamp packages containing five wine-gallons, or more, of distilled spirits filled on their premises.

Instructions concerning their duties as to marking and stamping such packages, and upon change of package by them, will be found in series 7, No. 7, revised

RETAIL LIQUOR DEALERS.

Retail liquor dealers are only authorized to sell in quantities less than five gallons, and no reinspection or stamping of the package of spirits so sold by them is required.

The spirits which they purchase in packages of five or more wine-gallons must be properly stamped, marked, or branded, and remain in the original casks or packages until drawn off for sale in retail packages.

There being no provision for stamping spirits on the premises of retail liquor dealers, they are not permitted to reduce the proof of spirits by the addition of water or otherwise.

A change of package of spirits to prevent leakage, or for other cause, can be made by a retail liquor dealer in such manner as to protect the spirits from detention or leakage only by transferring the same to vessels containing less than five wine-gallons each.

A retail liquor dealer can not legally sell several packages of the same kind of spirits at the same time, each containing less than five wine-gallons, but which contain in the aggregate more than five gallons.

AFFIXING, CANCELLATION, AND COVERING OF STAMPS.

By virtue of section 3322, Revised Statutes, it is hereby prescribed that the affixing, cancellation, and covering of stamps, including export stamps, placed on casks or other packages containing distilled spirits, shall be done in the following manner, viz:

Affixing.—The affixing of stamps, other than wholesale liquor dealers' and fruit distillers', will be done by the gauger, and, when at a distillery, in the presence of the storekeeper.

In attaching the stamps care will be taken to see that the surface of the head of the cask or package where the stamp is to be placed is clean and smooth, and free from paint, oil, or any substance which would have a tendency to cause the stamp to crack or peel off; and that the paste or glue furnished is of the best quality, strong and well mixed, and every way suitable for attaching the stamp to the wood. Transparent varnish, or any other adhesive material which will cause the stamp to stick securely and permanently, may be used for that purpose.

In affixing stamps other than those having a slip of paper attached to the back, one tack will be carefully driven in each corner of the stamp, one in the center, and one in the center of each side, making seven tacks in all.

When attaching the stamps, a portion of which is required to be cut out when the casks to which they are attached are emptied, eight tacks will be used for each stamp, as follows: One to be driven in each of the four corners, one in each side near the middle, and two near the center above and below the portion to be cut out.

The tacks will be carefully selected, and none but those having well set heads will be used, the size to be governed by the thickness of the head of the package to be stamped. A five-gallon keg will not, of course, bear so large and long a tack as a forty-gallon cask.

The head of the cask to which the stamps, and accompanying marks and brands, are affixed is termed the "stamp head," and the head to be used for this purpose is the one to which the rod is applied in determining the head diameter. When both heads are measured either may be taken as the stamp head.

No marks, brands, caution notices, or other devices whatsoever, will be permitted on the "stamp head" which will in any manner cover, obscure, or interfere with the stamps, marks, and brands required to be affixed by law and regulations, which latter must all be put on the stamp head, leaving the other head to be used by the owner.

(See instructions as to "TRADE MARKS AND CAUTION NOTICES" on page 119.)

Cancellation.—The stamp having been affixed, it must immediately be canceled. For this purpose the gauger will use a stencil plate of brass or copper, in which will be cut not less than five fine parallel waved lines, long enough to extend not less than three-quarters of an inch beyond each side of the stamp, on the wood of the cask; and the name of the gauger must be cut on one end of the plate, and his title, viz, "U. S. Gauger," and district on the other end, perpendicular to the lines. This plate must be imprinted, with black, durable, coloring material, over and across the stamp, as indicated, and the stencil plate will be so set as to bring the five parallel waved lines across the stamp at such points as will least obscure the reading, and the coloring material will be so applied with the brush as to make these lines distinct, without blotting or spreading over the stamp. The stencil plates, with the edges of the cuttings

of the lines, letters, and figures, will be kept clean, and the coloring material will be carefully examined to see that it is of a quality which will flow readily without spreading and will make a distinct and durable mark.

Covering.—The stamp having been affixed and canceled, it must be immediately covered with a coating of transparent varnish. No varnish will be used which is not transparent, or which is oily enough to affect in the least the paste on the stamp.

Parties for whom spirits are gauged are required to furnish all the help needed to handle the cask or package; to furnish the paste or glue, tacks, varnish, paint or coloring material, brushes, stencils, branding irons, vessels, and every necessary facility for the preparation of the cask or package to be put upon the market, except the instruments for weighing and gauging the spirits. The above requirement as to supplying "stencils" is not to be construed as applying to the gauger's canceling stencil, bearing his name, title, and district, as this must be provided by the gauger and kept continually in his possession. The gauger being authorized to require all this, and to receive from the Government his fee for the work performed, he is in turn held responsible that when the cask or package leaves his hands the legal preparation for marketing is every way complete.

Stamps may be tacked and varnished by a person other than the gauger, under the direct personal supervision of the gauger.

UNOFFICIAL OCCUPATIONS OF INTERNAL-REVENUE GAUGERS.

Gaugers are prohibited by section 3168, Revised Statutes, under penalty of dismissal from office and a heavy fine, from being or becoming interested, directly or indirectly, in the manufacture of tobacco, snuff, or cigars, or in the production, rectification, or redistillation of distilled spirits, or in the production of fermented liquors.

Gaugers will not be permitted to be, or to become, interested, directly or indirectly, in the purchase or sale of distilled spirits or fermented liquors.

Any gauger found to be so interested will be recommended for summary dismissal from office.

With the consent of collectors, gaugers are permitted to engage in any business, except as above, including gauging other than that performed in their official capacity, provided that such business or gauging does not, in the least, interfere with the efficient discharge of their official duties.

In the performance of commercial gauging, however, the prescribed United States standard instruments must be used, and the regulations governing official gauging in the ascertainment of the volume and proof of distilled spirits must be strictly observed.

Where it can be done without interfering with the proper discharge of their official duties, internal-revenue gaugers, in addition to performing unofficial gauging as above, may furnish additional copies of, or extracts from, their official reports on Forms 59 and 237 only, and only upon a written request from the person desiring the same. Such applications should state the number of packages to be gauged or reported, and whether an actual gauge is desired or only an extra copy of the gauger's official report, and all such applications must be filed in the collector's office at the end of each month by the gauger.

The extra copies of reports so furnished must correspond exactly as to serial numbers of packages and stamps, proof, contents, etc., of each package, with the official report of the gauger.

For his services for such unofficial gauging, and for extra copies of his official reports, the gauger may be allowed to collect from the owner of the spirits a sum not exceeding in any case 8 cents a package for each package of spirits

actually gauged, or 3 cents for each package embraced in the copy of the report furnished.

At the end of the month the gauger must file with the collector a report showing the names of the persons from whom such fees were collected, and the exact amount received from each during the month.

In making reports of unofficial gauging, or the extra copies of reports of official gauging herein contemplated, the blank forms furnished by the Department should not be used, and such copies are additional to the one copy of each official report which the gauger is required by regulations to furnish to the person for whom the gauging is done without charge. Reports of unofficial gauging must not be signed by gaugers in their official capacity.

GENERAL INSTRUCTIONS TO INTERNAL-RENENUE GAUGERS.

Section 3324 of the Revised Statutes requires, at the time of emptying of any cask or package containing distilled spirits, the effacement and obliteration of any mark, brand, or stamp placed on the cask or package in conformity to law.

Before proceeding to gauge casks or packages when filled for entry into distillery warehouse, or to determine the proof of their contents, gaugers will require the removal or obliteration of all marks or brands on the casks or packages indicating dimensions, volume, or proof, whether the same shall have been made by a Government gauger, a commercial gauger, or by any other person.

Gaugers will not permit distillers, or other persons, to alter or change the volume or proof of the spirits in casks or packages after they commence to gauge the same; nor are gaugers permitted to gauge packages while empty; nor to determine the proof of spirits before the same are placed in casks or packages, and turned over to the gauger for the official gauging and stamping.

In gauging and weighing distilled spirits, gaugers will confine themselves to finding the true volume and proof of the spirits contained in the packages after being filled; to putting the required marks and stamps upon the packages; to making out the required reports; to the proper supervision and custody of the cistern room; and to seeing that the packages gauged and weighed by them are deposited in the distillery bonded warehouse, in charge of the storekeeper.

Gaugers are not permitted to fill casks, or adjust wantage, or proof.

Gaugers will carefully examine the make and condition of each cask gauged by them, and any departure from the usual form and style will be made the subject of strict inquiry. Such variation may be found in the undue thickness of the bung stave, or a projection in opposite staves beneath the bung, or an oval shape, making a greater diameter in the transverse to the bung diameter than the bung diameter.

Gaugers will not be permitted to make any greater allowance for the thickness of the heads of casks gauged by them than the allowance made by the combination gauging rod (three-fourths of an inch) unless specially authorized; and when so authorized they will make frequent examination of the heads, by boring or otherwise, in order to determine as to their actual thickness. In all instances where a greater allowance is made for the thickness of the heads than the allowance made by the standard gauging rod, the gauger will mark on the heads of the casks, in a legible manner, the words, "*Head —— inch thick*," inserting in the blank the actual thickness of the head, in inches and tenths.

In taking the length of 20-gallon packages or less, an addition of one-half inch to the caliper measurement will be made, unless the gauger knows that such packages have

heads of at least three-fourths of an inch in thickness. Thus, if the caliper shows 19.4 inches the length will be called 19.9 inches.

Gaugers inspecting and weighing spirits drawn from receiving cisterns, rectifying vats, or tanks, or from any large vessel into smaller ones, will determine the proof of the spirit in each cask into which it is drawn, and in no instance will they mark the average proof of the spirits found in the large vessel upon the small vessel.

Gaugers are strictly prohibited from cutting or marking the wine-gallons, proof, or proof-gallons upon any cask or package when empty. They are also forbidden to cut or mark the proof or contents upon any cask when filled until they have determined the same by the use of the United States standard instruments. They are specially enjoined to keep their instruments in good condition, and to carefully note any variations in the indications, and to report to their collector at once any suspicion of inaccuracy. Any discrepancy in the gauge or proof of spirits shipped from the place of original gauge which can not be satisfactorily accounted for is taken as evidence of fraud, and renders the package liable to seizure.

Gaugers are especially directed to *personally* gauge the packages, and determine the volume and the true per cent of proof of their contents. They will also with their own hands put upon each cask or package gauged by them all the marks, brands, and stamps required by law and regulations, and see that in all respects each cask or package is in a condition to be put upon the market without being subjected to detention or seizure. Under no circumstances will gaugers be permitted to delegate these duties to an assistant. So much of the distiller's special brand, however, as is permitted to be put upon the casks prior to being filled at the cisterns, may be cut or burned and the particular name of the spirits, as known to the trade, may be marked

or branded, and the stamps tacked and varnished by another person. In case of spirits put up by a rectifier, the particular name of the spirits, as well as the name and place of business of the rectifier, may be marked or branded by the rectifier.

The performance of these duties, however, will be under the direct personal supervision of the gauger, who will be held responsible for the accuracy and correctness of the duties thus performed.

Section 3290, United States Revised Statutes, prohibits gaugers from employing any owner, agent, or superintendent of any distillery or distillery warehouse, or any rectifier or wholesale liquor dealer, or any person in their service, "to use his brands, or to discharge any of the duties imposed upon him by law," and imposes severe penalties for such dereliction of duty.

Attention must be given not only to place all the marks, brands, and stamps required upon each package, but to have the marks, brands, and the wording of the stamp legible.

In all cases where spirits are inspected and gauged, the number of wine and proof gallons must be cut upon the bung stave.

Gaugers are required to exercise special care in gauging and weighing spirits, in order that no more of the spirits may be spilled than can possibly be avoided; and in all cases they will return the spirits used in the test cup, or remaining in the thief, to the same cask from whence they were taken.

Any wastage of spirits occurring in gauging and proving which can not be avoided, such as drippings from the gauging rod in ascertaining the bung diameter, from the wantage rod in determining the wantage, or from the test cup in weighing the spirits, will not be noted nor considered in determining the quantity gauged.

In filling up stamps for distilled spirits gaugers will use one of the kinds of ink prescribed for such purpose by this office.

Section 3292, Revised Statutes, provides that "every gauger who makes any false or fraudulent inspection, gauging, or proof, shall pay a penalty of one thousand dollars, and be fined not less than five hundred dollars nor more than five thousand dollars, and imprisoned not less than three months nor more than three years."

Gaugers should familiarize themselves with the several clauses of section 3169, Revised Statutes, and especially with the ninth, which imposes a severe penalty upon any revenue officer or agent who, having knowledge or information of the violation of any revenue law by any person, or of fraud committed by any person against the United States under any revenue law, fails to report in writing such knowledge or information to his next superior officer and to the Commissioner of Internal Revenue.

The gauger will make frequent examinations of the rectifier's books, with a view of satisfying himself that all the packages emptied in the establishment have been properly reported to the collector.

When two or more gaugers are assigned to duty at one place, each must take a portion of the work, and perform the entire gauging, proving, branding, marking, and stamping of each cask or package to which his canceling stencil is applied.

Gaugers are made the custodians of the receiving rooms at distilleries, and are held responsible for the safekeeping of the spirits run into the receiving cisterns until drawn off and delivered in proper manner into the custody of the storekeeper at the distillery-bonded warehouse, so far as any loss may be reasonably guarded against, and under no circumstances will they intrust the key to the lock on the door of the receiving room to any person other than the

collector of the district; and they are enjoined not to admit any person into the receiving room except in their presence.

Gaugers and "storekeepers and gaugers" are especially directed to have all points about the distillery premises under their control secured as required in the regulations (Series 7, No. 7, revised), and under all circumstances to keep locked all points requiring locks, except when present at that particular place.

They are also strictly prohibited from intrusting locks, keys, or seals in their charge to any person other than an internal-revenue officer entitled to receive the same, and under no circumstances will they permit locks to remain open, whether hanging by the shackle or otherwise.

Gaugers should make themselves thoroughly conversant with the regulations governing the marking, branding, and stamping of the several kinds of packages of distilled spirits, in order that they may intelligently discharge the duty thus enjoined upon them.

TRADE-MARKS AND CAUTION NOTICES.

Section 17 of the act of February 8, 1875, (section 3316a, compilation of 1894), provides "That if any person shall affix, or cause to be affixed, to or upon any cask or package containing, or intended to contain, distilled spirits, any imitation stamp or other engraved, printed, stamped, or photographed label, device, or token, whether the same be designed as a trade-mark, caution notice, caution, or otherwise, and which shall be in the similitude or likeness of, or shall have the resemblance or general appearance of, any internal-revenue stamp required by law to be affixed to or upon any cask or package containing distilled spirits, he shall, for each offense, be liable to a penalty of one hundred dollars, and, on conviction, shall be fined not more than one thousand dollars, and imprisoned not more than three years, and the cask or package with its contents shall be

forfeited to the United States." With reference to this provision of law gaugers are informed that they are prohibited from applying their canceling plate to any caution notice, trade-mark, or similar device which may be attached to casks or packages containing distilled spirits.

COMPLIANCE WITH THESE REGULATIONS ENJOINED.

Collectors will furnish internal-revenue gaugers and storekeepers and gaugers with a copy of these regulations and instructions, and any neglect or failure to comply with the same on their part will be deemed sufficient cause for immediate dismissal from office.

The regulations herein, so far as pertaining to the duties of a gauger, will be observed by all gauging officers.

REGULATIONS INCONSISTENT HEREWITH REVOKED.

All regulations and instructions heretofore published inconsistent with these regulations are revoked from this date.

JOS. S. MILLER,
Commissioner.

Fig. 1.

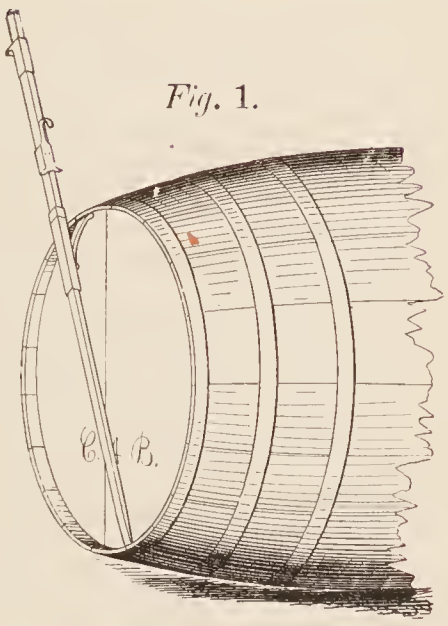


Fig. 2.

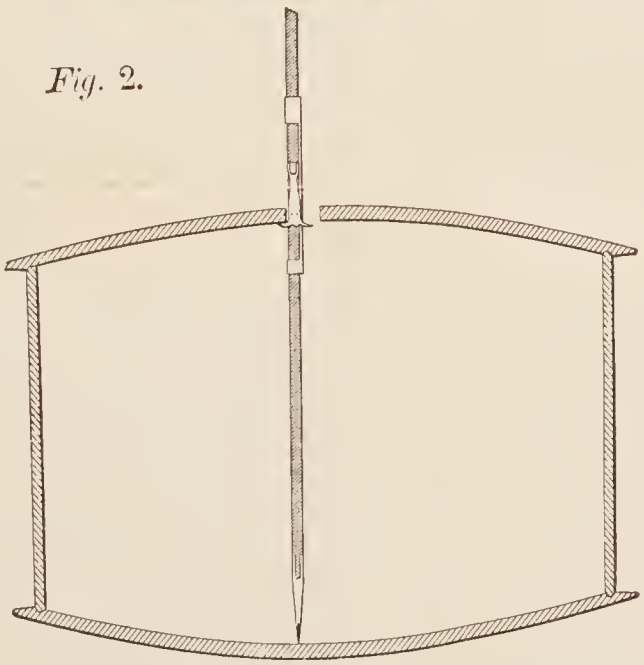


Fig. 3.

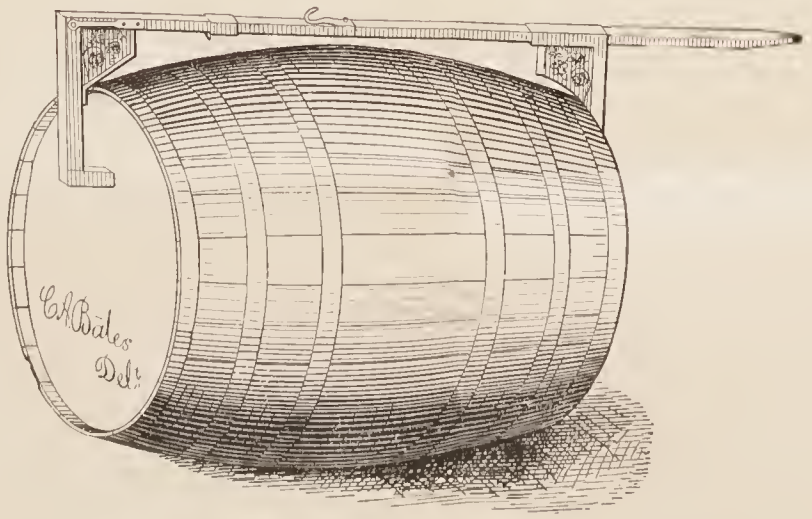
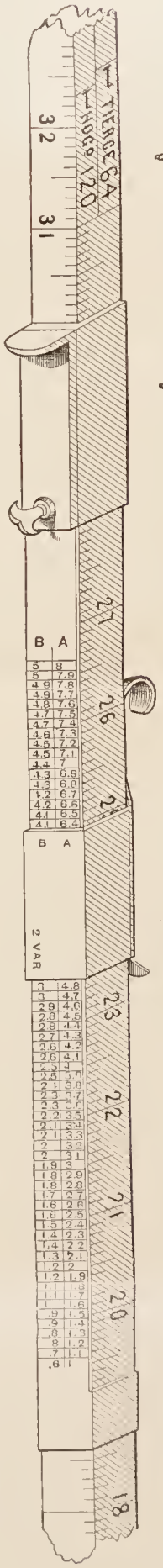


Fig. 4.



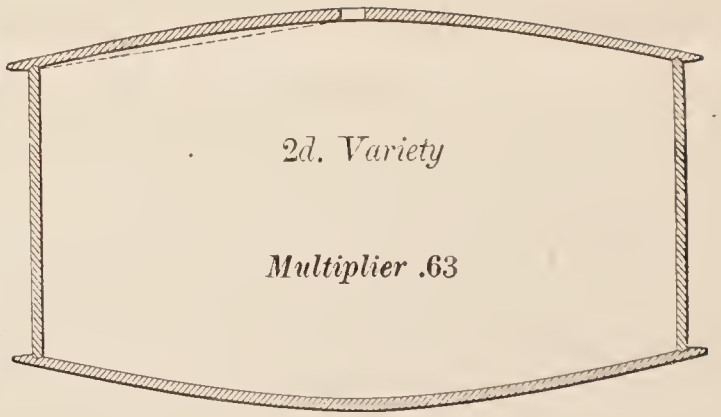


TABLE No. 1.

FOR FINDING THE CAPACITY IN WINE-GALLONS.

THE LENGTH AND MEAN DIAMETER OF A CASK OR PACKAGE HAVING BEEN FOUND, OPPOSITE THE FORMER, ON THE LEFT-HAND MARGIN, AND BENEATH THE LATTER, ON THE UPPER MARGIN, WILL BE FOUND THE CAPACITY IN WINE-GALLONS.

In computing this table the following rule has been observed:

The square of the mean diameter of the cask, in inches and tenths of inches, is multiplied by the decimal .0034, and this product by the length of the cask.

In the final product, any fraction less than .25 is dropped; if .25 or any intermediate fraction to and including .75, it is called one-half gallon; if above .75 to the unit, it is called a whole gallon.

Lengths.	10. MEAN DIAMETERS.									
	10.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
13.0	4½	4½	4½	4½	5	5	5	5	5	5½
.1	4½	4½	4½	4½	5	5	5	5	5	5½
.2	4½	4½	4½	5	5	5	5	5	5	5½
.3	4½	4½	4½	5	5	5	5	5	5½	5½
.4	4½	4½	4½	5	5	5	5	5	5½	5½
.5	4½	4½	5	5	5	5	5	5½	5½	5½
.6	4½	4½	5	5	5	5	5	5½	5½	5½
.7	4½	5	5	5	5	5	5	5½	5½	5½
.8	4½	5	5	5	5	5	5½	5½	5½	5½
.9	4½	5	5	5	5	5	5½	5½	5½	5½
14.0	5	5	5	5	5	5	5½	5½	5½	5½
.1	5	5	5	5	5	5½	5½	5½	5½	5½
.2	5	5	5	5	5	5½	5½	5½	5½	5½
.3	5	5	5	5	5½	5½	5½	5½	5½	6
.4	5	5	5	5	5½	5½	5½	5½	5½	6
.5	5	5	5	5	5½	5½	5½	5½	6	6
.6	5	5	5	5½	5½	5½	5½	5½	6	6
.7	5	5	5	5½	5½	5½	5½	5½	6	6
.8	5	5	5	5½	5½	5½	5½	6	6	6
.9	5	5	5½	5½	5½	5½	5½	6	6	6
15.0	5	5	5½	5½	5½	5½	5½	6	6	6
.1	5	5	5½	5½	5½	5½	6	6	6	6
.2	5	5½	5½	5½	5½	5½	6	6	6	6
.3	5	5½	5½	5½	5½	5½	6	6	6	6
.4	5	5½	5½	5½	5½	6	6	6	6	6
.5	5½	5½	5½	5½	5½	6	6	6	6	6½
.6	5½	5½	5½	5½	5½	6	6	6	6	6½
.7	5½	5½	5½	5½	6	6	6	6	6	6½
.8	5½	5½	5½	5½	6	6	6	6	6½	6½
.9	5½	5½	5½	5½	6	6	6	6	6½	6½
16.0	5½	5½	5½	6	6	6	6	6	6½	6½
.1	5½	5½	5½	6	6	6	6	6½	6½	6½
.2	5½	5½	5½	6	6	6	6	6½	6½	6½
.3	5½	5½	6	6	6	6	6	6½	6½	6½
.4	5½	5½	6	6	6	6	6½	6½	6½	6½
.5	5½	5½	6	6	6	6	6½	6½	6½	6½
.6	5½	6	6	6	6	6	6½	6½	6½	6½
.7	5½	6	6	6	6	6½	6½	6½	6½	6½
.8	5½	6	6	6	6	6½	6½	6½	6½	7
.9	5½	6	6	6	6	6½	6½	6½	6½	7

Lengths.	10. MEAN DIAMETERS.									
	10.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
17.0	6	6	6	6	6⅓	6½	6½	6⅔	6½	7
.1	6	6	6	6	6½	6½	6½	6½	7	7
.2	6	6	6	6	6½	6½	6½	6½	7	7
.3	6	6	6	6	6½	6½	6½	6½	7	7
.4	6	6	6	6½	6½	6½	6½	7	7	7
.5	6	6	6	6½	6½	6½	6½	7	7	7
.6	6	6	6	6½	6½	6½	6½	7	7	7
.7	6	6	6½	6½	6⅔	6½	7	7	7	7
.8	6	6	6½	6½	6½	6½	7	7	7	7
.9	6	6	6½	6½	6½	6½	7	7	7	7
18.0	6	6	6½	6½	6½	6½	7	7	7	7½
.1	6	6½	6½	6½	6½	7	7	7	7	7½
.2	6	6½	6½	6½	6⅔	7	7	7	7	7½
.3	6	6½	6½	6½	6½	7	7	7	7½	7½
.4	6½	6½	6½	6½	7	7	7	7	7½	7½
.5	6½	6½	6½	6½	7	7	7	7	7½	7½
.6	6½	6½	6½	6½	7	7	7	7	7½	7½
.7	6½	6½	6½	6½	7	7	7	7⅓	7½	7½
.8	6½	6½	6½	7	7	7	7	7⅓	7½	7½
.9	6½	6½	6½	7	7	7	7	7½	7½	7½
19.0	6½	6½	6½	7	7	7	7½	7½	7½	7½
.1	6½	6½	7	7	7	7	7½	7½	7½	7½
.2	6½	6½	7	7	7	7	7½	7½	7½	8
.3	6½	6½	7	7	7	7	7½	7½	7½	8
.4	6½	6½	7	7	7	7½	7½	7½	7½	8
.5	6½	7	7	7	7	7½	7½	7½	7½	8
.6	6½	7	7	7	7	7½	7½	7½	8	8
.7	6½	7	7	7	7	7½	7½	7½	8	8
.8	6½	7	7	7	7⅓	7½	7½	7½	8	8
.9	7	7	7	7	7⅓	7½	7½	7½	8	8
20.0	.....	.....	.....	.....	....	.....	.....	.....	.....	.....
.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	11. MEAN DIAMETERS.									
	11.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
13.0	5½	5½	5½	5½	5½	6	6	6	6	6½
.1	5½	5½	5½	5½	6	6	6	6	6	6½
.2	5½	5½	5½	5½	6	6	6	6	6	6½
.3	5½	5½	6	6	6	6	6	6	6½	6½
.4	5½	5½	6	6	6	6	6	6	6½	6½
.5	5½	5½	6	6	6	6	6	6½	6½	6½
.6	5½	5½	6	6	6	6	6	6½	6½	6½
.7	5½	5½	6	6	6	6	6½	6½	6½	6½
.8	5½	6	6	6	6	6	6½	6½	6½	6½
.9	5½	6	6	6	6	6½	6½	6½	6½	6½
14.0	6	6	6	6	6	6½	6½	6½	6½	6½
.1	6	6	6	6	6	6½	6½	6½	6½	7
.2	6	6	6	6	6½	6½	6½	6½	6½	7
.3	6	6	6	6	6½	6½	6½	6½	7	7
.4	6	6	6	6½	6½	6½	6½	6½	7	7
.5	6	6	6	6½	6½	6½	6½	6½	7	7
.6	6	6	6	6½	6½	6½	6½	7	7	7
.7	6	6	6½	6½	6½	6½	6½	7	7	7
.8	6	6	6½	6½	6½	6½	7	7	7	7
.9	6	6	6½	6½	6½	6½	7	7	7	7
15.0	6	6½	6½	6½	6½	6½	7	7	7	7
.1	6	6½	6½	6½	6½	7	7	7	7	7½
.2	6½	6½	6½	6½	6½	7	7	7	7	7½
.3	6½	6½	6½	6½	7	7	7	7	7	7½
.4	6½	6½	6½	6½	7	7	7	7	7½	7½
.5	6½	6½	6½	6½	7	7	7	7	7½	7½
.6	6½	6½	6½	7	7	7	7	7½	7½	7½
.7	6½	6½	6½	7	7	7	7	7½	7½	7½
.8	6½	6½	6½	7	7	7	7	7½	7½	7½
.9	6½	6½	7	7	7	7	7½	7½	7½	7½
16.0	6½	6½	7	7	7	7	7½	7½	7½	7½
.1	6½	6½	7	7	7	7	7½	7½	7½	8
.2	6½	7	7	7	7	7½	7½	7½	7½	8
.3	6½	7	7	7	7	7½	7½	7½	7½	8
.4	6½	7	7	7	7	7½	7½	7½	8	8
.5	7	7	7	7	7½	7½	7½	7½	8	8
.6	7	7	7	7	7½	7½	7½	7½	8	8
.7	7	7	7	7½	7½	7½	7½	8	8	8
.8	7	7	7	7½	7½	7½	7½	8	8	8
.9	7	7	7	7½	7½	7½	7½	8	8	8

Lengths.	11. MEAN DIAMETERS.									
	11.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
17.0	7	7	7½	7½	7½	7½	8	8	8	8
.1	7	7	7½	7½	7½	7½	8	8	8	8
.2	7	7	7½	7½	7½	7½	8	8	8	8½
.3	7	7	7½	7½	7½	8	8	8	8	8½
.4	7	7½	7½	7½	7½	8	8	8	8	8½
.5	7	7½	7½	7½	7½	8	8	8	8½	8½
.6	7	7½	7½	7½	8	8	8	8	8½	8½
.7	7½	7½	7½	7½	8	8	8	8	8½	8½
.8	7½	7½	7½	7½	8	8	8	8½	8½	8½
.9	7½	7½	7½	8	8	8	8	8½	8½	8½
18.0	7½	7½	7½	8	8	8	8	8½	8½	8½
.1	7½	7½	7½	8	8	8	8½	8½	8½	8½
.2	7½	7½	8	8	8	8	8½	8½	8½	9
.3	7½	7½	8	8	8	8	8½	8½	8½	9
.4	7½	7½	8	8	8	8½	8½	8½	8½	9
.5	7½	7½	8	8	8	8½	8½	8½	9	9
.6	7½	8	8	8	8	8½	8½	8½	9	9
.7	7½	8	8	8	8½	8½	8½	8½	9	9
.8	7½	8	8	8	8½	8½	8½	9	9	9
.9	8	8	8	8	8½	8½	8½	9	9	9
19.0	8	8	8	8	8½	8½	8½	9	9	9
.1	8	8	8	8½	8½	8½	8½	9	9	9
.2	8	8	8	8½	8½	8½	9	9	9	9
.3	8	8	8	8½	8½	8½	9	9	9	9½
.4	8	8	8½	8½	8½	8½	9	9	9	9½
.5	8	8	8½	8½	8½	9	9	9	9	9½
.6	8	8	8½	8½	8½	9	9	9	9½	9½
.7	8	8½	8½	8½	8½	9	9	9	9½	9½
.8	8	8½	8½	8½	8½	9	9	9	9½	9½
.9	8	8½	8½	8½	9	9	9	9½	9½	9½
20.0	8	8½	8½	8½	9	9	9	9½	9½	9½
.1	8½	8½	8½	8½	9	9	9	9½	9½	9½
.2	8½	8½	8½	9	9	9	9	9½	9½	9½
.3	8½	8½	8½	9	9	9	9½	9½	9½	10
.4	8½	8½	8½	9	9	9	9½	9½	9½	10
.5	8½	8½	8½	9	9	9	9½	9½	9½	10
.6	8½	8½	9	9	9	9½	9½	9½	10	10
.7	8½	8½	9	9	9	9½	9½	9½	10	10
.8	8½	8½	9	9	9	9½	9½	9½	10	10
.9	8½	9	9	9	9	9½	9½	9½	10	10

Lengths.	12. MEAN DIAMETERS.									
	12.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
16.0	8	8	8	8	8½	8½	8½	9	9	9
.1	8	8	8	8½	8½	8½	8½	9	9	9
.2	8	8	8	8½	8½	8½	8½	9	9	9
.3	8	8	8	8½	8½	8½	9	9	9	9
.4	8	8	8½	8½	8½	8½	9	9	9	9½
.5	8	8	8½	8½	8½	9	9	9	9	9½
.6	8	8½	8½	8½	8½	9	9	9	9	9½
.7	8	8½	8½	8½	8½	9	9	9	9½	9½
.8	8	8½	8½	8½	9	9	9	9	9½	9½
.9	8½	8½	8½	8½	9	9	9	9½	9½	9½
17.0	8½	8½	8½	8½	9	9	9	9½	9½	9½
.1	8½	8½	8½	9	9	9	9	9½	9½	9½
.2	8½	8½	8½	9	9	9	9½	9½	9½	9½
.3	8½	8½	9	9	9	9	9½	9½	9½	10
.4	8½	8½	9	9	9	9	9½	9½	9½	10
.5	8½	8½	9	9	9	9½	9½	9½	9½	10
.6	8½	9	9	9	9	9½	9½	9½	10	10
.7	8½	9	9	9	9½	9½	9½	9½	10	10
.8	8½	9	9	9	9½	9½	9½	10	10	10
.9	9	9	9	9	9½	9½	9½	10	10	10
18.0	9	9	9	9½	9½	9½	9½	10	10	10
.1	9	9	9	9½	9½	9½	10	10	10	10
.2	9	9	9	9½	9½	9½	10	10	10	10½
.3	9	9	9½	9½	9½	9½	10	10	10	10½
.4	9	9	9½	9½	9½	10	10	10	10	10½
.5	9	9	9½	9½	9½	10	10	10	10½	10½
.6	9	9½	9½	9½	9½	10	10	10	10½	10½
.7	9	9½	9½	9½	10	10	10	10½	10½	10½
.8	9	9½	9½	9½	10	10	10	10½	10½	10½
.9	9½	9½	9½	9½	10	10	10	10½	10½	10½
19.0	9½	9½	9½	10	10	10	10½	10½	10½	11
.1	9½	9½	9½	10	10	10	10½	10½	10½	11
.2	9½	9½	9½	10	10	10	10½	10½	10½	11
.3	9½	9½	10	10	10	10½	10½	10½	11	11
.4	9½	9½	10	10	10	10½	10½	10½	11	11
.5	9½	9½	10	10	10	10½	10½	10½	11	11
.6	9½	10	10	10	10	10½	10½	10½	11	11
.7	9½	10	10	10	10½	10½	10½	11	11	11
.8	9½	10	10	10	10½	10½	10½	11	11	11
.9	9½	10	10	10	10½	10½	10½	11	11	11½

Lengths.	12. MEAN DIAMETERS.									
	12.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
20.0	10	10	10	10½	10½	10½	11	11	11	11½
.1	10	10	10	10½	10½	10½	11	11	11	11½
.2	10	10	10	10½	10½	10½	11	11	11½	11½
.3	10	10	10½	10½	10½	11	11	11	11½	11½
.4	10	10	10½	10½	10½	11	11	11	11½	11½
.5	10	10	10½	10½	10½	11	11	11	11½	11½
.6	10	10½	10½	10½	11	11	11	11½	11½	11½
.7	10	10½	10½	10½	11	11	11	11½	11½	11½
.8	10	10½	10½	10½	11	11	11	11½	11½	12
.9	10	10½	10½	11	11	11	11½	11½	11½	12
21.0	10½	10½	10½	11	11	11	11½	11½	11½	12
.1	10½	10½	10½	11	11	11	11½	11½	12	12
.2	10½	10½	10½	11	11	11½	11½	11½	12	12
.3	10½	10½	11	11	11	11½	11½	11½	12	12
.4	10½	10½	11	11	11	11½	11½	11½	12	12
.5	10½	10½	11	11	11	11½	11½	12	12	12
.6	10½	11	11	11	11½	11½	11½	12	12	12
.7	10½	11	11	11	11½	11½	11½	12	12	12½
.8	10½	11	11	11	11½	11½	12	12	12	12½
.9	10½	11	11	11½	11½	11½	12	12	12	12½

Lengths.	13. MEAN DIAMETERS.									
	13.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
17.0	10	10	10	10	10½	10½	10½	11	11	11
.1	10	10	10	10½	10½	10½	11	11	11	11
.2	10	10	10	10½	10½	10½	11	11	11	11½
.3	10	10	10	10½	10½	10½	11	11	11	11½
.4	10	10	10½	10½	10½	11	11	11	11½	11½
.5	10	10	10½	10½	10½	11	11	11	11½	11½
.6	10	10½	10½	10½	10½	11	11	11	11½	11½
.7	10	10½	10½	10½	11	11	11	11½	11½	11½
.8	10	10½	10½	10½	11	11	11	11½	11½	11½
.9	10½	10½	10½	11	11	11	11½	11½	11½	12
18.0	10½	10½	10½	11	11	11	11½	11½	11½	12
.1	10½	10½	10½	11	11	11	11½	11½	11½	12
.2	10½	10½	11	11	11	11½	11½	11½	12	12
.3	10½	10½	11	11	11	11½	11½	11½	12	12
.4	10½	10½	11	11	11	11½	11½	11½	12	12
.5	10½	11	11	11	11½	11½	11½	12	12	12
.6	10½	11	11	11	11½	11½	11½	12	12	12
.7	10½	11	11	11	11½	11½	12	12	12	12½
.8	11	11	11	11½	11½	11½	12	12	12	12½
.9	11	11	11	11½	11½	11½	12	12	12	12½

Lengths.	13. MEAN DIAMETERS.									
	13.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
19.0	11	11	11½	11½	11½	12	12	12	12½	12½
.1	11	11	11½	11½	11½	12	12	12	12½	12½
.2	11	11	11½	11½	11½	12	12	12½	12½	12½
.3	11	11½	11½	11½	12	12	12	12½	12½	12½
.4	11	11½	11½	11½	12	12	12	12½	12½	12½
.5	11	11½	11½	11½	12	12	12½	12½	12½	13
.6	11½	11½	11½	12	12	12	12½	12½	12½	13
.7	11½	11½	11½	12	12	12	12½	12½	13	13
.8	11½	11½	11½	12	12	12½	12½	12½	13	13
.9	11½	11½	12	12	12	12½	12½	12½	13	13
20.0	11½	11½	12	12	12	12½	12½	13	13	13
.1	11½	11½	12	12	12½	12½	12½	13	13	13
.2	11½	12	12	12	12½	12½	12½	13	13	13½
.3	11½	12	12	12	12½	12½	13	13	13	13½
.4	11½	12	12	12½	12½	12½	13	13	13	13½
.5	12	12	12	12½	12½	12½	13	13	13½	13½
.6	12	12	12	12½	12½	13	13	13	13½	13½
.7	12	12	12½	12½	12½	13	13	13	13½	13½
.8	12	12	12½	12½	12½	13	13	13½	13½	13½
.9	12	12	12½	12½	13	13	13	13½	13½	13½
21.0	12	12½	12½	12½	13	13	13	13½	13½	14
.1	12	12½	12½	12½	13	13	13½	13½	13½	14
.2	12	12½	12½	13	13	13	13½	13½	13½	14
.3	12	12½	12½	13	13	13	13½	13½	14	14
.4	12½	12½	12½	13	13	13½	13½	13½	14	14
.5	12½	12½	12½	13	13	13½	13½	13½	14	14
.6	12½	12½	13	13	13	13½	13½	14	14	14
.7	12½	12½	13	13	13	13½	13½	14	14	14½
.8	12½	12½	13	13	13½	13½	13½	14	14	14½
.9	12½	13	13	13	13½	13½	14	14	14	14½
22.0	12½	13	13	13	13½	13½	14	14	14	14½
.1	12½	13	13	13½	13½	13½	14	14	14½	14½
.2	13	13	13	12½	13½	14	14	14	14½	14½
.3	13	13	13	13½	13½	14	14	14	14½	14½
.4	13	13	13½	13½	13½	14	14	14½	14½	14½
.5	13	13	13½	13½	13½	14	14	14½	14½	15
.6	13	13	13½	13½	14	14	14	14½	14½	15
.7	13	13	13½	13½	14	14	14½	14½	14½	15
.8	13	13½	13½	13½	14	14	14½	14½	15	15
.9	13	13½	13½	14	14	14	14½	14½	15	15

Lengths.	14. MEAN DIAMETERS.									
	14.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
18.0	12	12	12½	12½	12½	13	13	13	13½	13½
.1	12	12	12½	12½	13	13	13	13½	13½	13½
.2	12	12½	12½	12½	13	13	13	13½	13½	13½
.3	12	12½	12½	12½	13	13	13½	13½	13½	14
.4	12½	12½	12½	13	13	13	13½	13½	13½	14
.5	12½	12½	12½	13	13	13	13½	13½	14	14
.6	12½	12½	13	13	13	13½	13½	13½	14	14
.7	12½	12½	13	13	13	13½	13½	13½	14	14
.8	12½	12½	13	13	13½	13½	13½	14	14	14
.9	12½	13	13	13	13½	13½	13½	14	14	14½
19.0	12½	13	13	13	13½	13½	14	14	14	14½
.1	12½	13	13	13½	13½	13½	14	14	14	14½
.2	13	13	13	13½	13½	13½	14	14	14½	14½
.3	13	13	13	13½	13½	14	14	14	14½	14½
.4	13	13	13½	13½	13½	14	14	14½	14½	14½
.5	13	13	13½	13½	13½	14	14	14½	14½	14½
.6	13	13	13½	13½	14	14	14	14½	14½	15
.7	13	13½	13½	13½	14	14	14½	14½	14½	15
.8	13	13½	13½	14	14	14	14½	14½	14½	15
.9	13½	13½	13½	14	14	14	14½	14½	15	15
20.0	13½	13½	13½	14	14	14½	14½	14½	15	15
.1	13½	13½	14	14	14	14½	14½	15	15	15
.2	13½	13½	14	14	14	14½	14½	15	15	15
.3	13½	13½	14	14	14½	14½	14½	15	15	15½
.4	13½	14	14	14	14½	14½	15	15	15	15½
.5	13½	14	14	14½	14½	14½	15	15	15½	15½
.6	13½	14	14	14½	14½	14½	15	15	15½	15½
.7	14	14	14	14½	14½	15	15	15	15½	15½
.8	14	14	14½	14½	14½	15	15	15½	15½	15½
.9	14	14	14½	14½	14½	15	15	15½	15½	16
21.0	14	14	14½	14½	15	15	15	15½	15½	16
.1	14	14½	14½	14½	15	15	15½	15½	15½	16
.2	14	14½	14½	14½	15	15	15½	15½	16	16
.3	14	14½	14½	15	15	15	15½	15½	16	16
.4	14½	14½	14½	15	15	15½	15½	15½	16	16
.5	14½	14½	14½	15	15	15½	15½	16	16	16
.6	14½	14½	15	15	15	15½	15½	16	16	16½
.7	14½	14½	15	15	15½	15½	15½	16	16	16½
.8	14½	14½	15	15	15½	15½	16	16	16	16½
.9	14½	15	15	15	15½	15½	16	16	16½	16½

Lengths.	14. MEAN DIAMETERS.									
	14.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
22.0	14½	15	15	15½	15½	15½	16	16	16½	16½
.1	14½	15	15	15½	15½	16	16	16	16½	16½
.2	15	15	15	15½	15½	16	16	16½	16½	17
.3	15	15	15½	15½	15½	16	16	16½	16½	17
.4	15	15	15½	15½	16	16	16	16½	16½	17
.5	15	15	15½	15½	16	16	16½	16½	17	17
.6	15	15½	15½	15½	16	16	16½	16½	17	17
.7	15	15½	15½	16	16	16	16½	16½	17	17
.8	15	15½	15½	16	16	16½	16½	17	17	17
.9	15½	15½	15½	16	16	16½	16½	17	17	17½
23.0	15½	15½	16	16	16	16½	16½	17	17	17½
.1	15½	15½	16	16	16½	16½	16½	17	17	17½
.2	15½	15½	16	16	16½	16½	17	17	17½	17½
.3	15½	15½	16	16	16½	16½	17	17	17½	17½
.4	15½	16	16	16½	16½	16½	17	17	17½	17½
.5	15½	16	16	16½	16½	17	17	17½	17½	17½
.6	15½	16	16	16½	16½	17	17	17½	17½	18
.7	16	16	16	16½	16½	17	17	17½	17½	18
.8	16	16	16½	16½	17	17	17	17½	17½	18
.9	16	16	16½	16½	17	17	17½	17½	18	18

Lengths.	15. MEAN DIAMETERS.									
	15.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
19.0	14½	14½	15	15	15½	15½	15½	16	16	16½
.1	14½	15	15	15	15½	15½	16	16	16	16½
.2	14½	15	15	15½	15½	15½	16	16	16½	16½
.3	15	15	15	15½	15½	16	16	16	16½	16½
.4	15	15	15	15½	15½	16	16	16½	16½	16½
.5	15	15	15½	15½	15½	16	16	16½	16½	17
.6	15	15	15½	15½	16	16	16	16½	16½	17
.7	15	15½	15½	15½	16	16	16½	16½	16½	17
.8	15	15½	15½	16	16	16	16½	16½	17	17
.9	15	15½	15½	16	16	16½	16½	16½	17	17
20.0	15½	15½	15½	16	16	16½	16½	17	17	17
.1	15½	15½	16	16	16	16½	16½	17	17	17½
.2	15½	15½	16	16	16½	16½	16½	17	17	17½
.3	15½	15½	16	16	16½	16½	17	17	17	17½
.4	15½	16	16	16	16½	16½	17	17	17½	17½
.5	15½	16	16	16½	16½	16½	17	17	17½	17½
.6	16	16	16	16½	16½	17	17	17½	17½	17½
.7	16	16	16½	16½	16½	17	17	17½	17½	18
.8	16	16	16½	16½	17	17	17	17½	17½	18
.9	16	16	16½	16½	17	17	17½	17½	17½	18

Lengths.	15. MEAN DIAMETERS.									
	15.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
21.0	16	16½	16½	16½	17	17	17½	17½	18	18
.1	16	16½	16½	17	17	17	17½	17½	18	18
.2	16	16½	16½	17	17	17½	17½	18	18	18
.3	16½	16½	16½	17	17	17½	17½	18	18	18½
.4	16½	16½	17	17	17½	17½	17½	18	18	18½
.5	16½	16½	17	17	17½	17½	18	18	18	18½
.6	16½	16½	17	17	17½	17½	18	18	18½	18½
.7	16½	17	17	17½	17½	17½	18	18	18½	18½
.8	16½	17	17	17½	17½	18	18	18½	18½	18½
.9	17	17	17	17½	17½	18	18	18½	18½	19
22.0	17	17	17½	17½	17½	18	18	18½	18½	19
.1	17	17	17½	17½	18	18	18½	18½	19	19
.2	17	17	17½	17½	18	18	18½	18½	19	19
.3	17	17½	17½	17½	18	18	18½	18½	19	19
.4	17	17½	17½	18	18	18½	18½	19	19	19½
.5	17	17½	17½	18	18	18½	18½	19	19	19½
.6	17½	17½	18	18	18	18½	18½	19	19	19½
.7	17½	17½	18	18	18½	18½	19	19	19½	19½
.8	17½	17½	18	18	18½	18½	19	19	19½	19½
.9	17½	18	18	18	18½	18½	19	19	19½	19½
23.0	17½	18	18	18½	18½	19	19	19½	19½	20
.1	17½	18	18	18½	18½	19	19	19½	19½	20
.2	17½	18	18	18½	18½	19	19	19½	19½	20
.3	18	18	18½	18½	19	19	19½	19½	20	20
.4	18	18	18½	18½	19	19	19½	19½	20	20
.5	18	18	18½	18½	19	19	19½	19½	20	20
.6	18	18½	18½	19	19	19½	19½	20	20	20½
.7	18	18½	18½	19	19	19½	19½	20	20	20½
.8	18	18½	18½	19	19	19½	19½	20	20	20½
.9	18½	18½	19	19	19½	19½	20	20	20½	20½
24.0	18½	18½	19	19	19½	19½	20	20	20½	20½
.1	18½	18½	19	19	19½	19½	20	20	20½	20½
.2	18½	19	19	19½	19½	20	20	20½	20½	21
.3	18½	19	19	19½	19½	20	20	20½	20½	21
.4	18½	19	19	19½	19½	20	20	20½	20½	21
.5	18½	19	19	19½	20	20	20½	20½	21	21
.6	19	19	19½	19½	20	20	20½	20½	21	21
.7	19	19	19½	19½	20	20	20½	20½	21	21
.8	19	19	19½	19½	20	20½	20½	21	21	21½
.9	19	19½	19½	20	20	20½	20½	21	21	21½

Lengths.	16. MEAN DIAMETERS.									
	16.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
20.0	17½	17½	18	18	18½	18½	18½	19	19	19½
.1	17½	17½	18	18	18½	18½	19	19	19½	19½
.2	17½	18	18	18	18½	18½	19	19	19½	19½
.3	17½	18	18	18½	18½	19	19	19	19½	19½
.4	18	18	18	18½	18½	19	19	19½	19½	20
.5	18	18	18½	18½	18½	19	19	19½	19½	20
.6	18	18	18½	18½	19	19	19½	19½	20	20
.7	18	18	18½	18½	19	19	19½	19½	20	20
.8	18	18½	18½	19	19	19½	19½	19½	20	20
.9	18	18½	18½	19	19	19½	19½	20	20	20½
21.0	18½	18½	18½	19	19	19½	19½	20	20	20½
.1	18½	18½	19	19	19½	19½	20	20	20	20½
.2	18½	18½	19	19	19½	19½	20	20	20½	20½
.3	18½	19	19	19	19½	19½	20	20	20½	20½
.4	18½	19	19	19½	19½	20	20	20½	20½	21
.5	18½	19	19	19½	19½	20	20	20½	20½	21
.6	19	19	19½	19½	20	20	20	20½	20½	21
.7	19	19	19½	19½	20	20	20½	20½	21	21
.8	19	19	19½	19½	20	20	20½	20½	21	21
.9	19	19½	19½	20	20	20½	20½	21	21	21½
22.0	19	19½	19½	20	20	20½	20½	21	21	21½
.1	19	19½	19½	20	20	20½	20½	21	21	21½
.2	19½	19½	20	20	20½	20½	21	21	21½	21½
.3	19½	19½	20	20	20½	20½	21	21	21½	21½
.4	19½	19½	20	20	20½	20½	21	21	21½	22
.5	19½	20	20	20½	20½	21	21	21½	21½	22
.6	19½	20	20	20½	20½	21	21	21½	21½	22
.7	20	20	20½	20½	21	21	21½	21½	22	22
.8	20	20	20½	20½	21	21	21½	21½	22	22
.9	20	20	20½	20½	21	21	21½	21½	22	22
23.0	20	20½	20½	21	21	21½	21½	22	22	22½
.1	20	20½	20½	21	21	21½	21½	22	22	22½
.2	20	20½	20½	21	21	21½	21½	22	22½	22½
.3	20½	20½	21	21	21½	21½	22	22	22½	22½
.4	20½	20½	21	21	21½	21½	22	22	22½	22½
.5	20½	20½	21	21	21½	22	22	22½	22½	23
.6	20½	21	21	21½	21½	22	22	22½	22½	23
.7	20½	21	21	21½	21½	22	22	22½	22½	23
.8	20½	21	21	21½	22	22	22½	22½	23	23
.9	21	21	21½	21½	22	22	22½	22½	23	23

Lengths.	16. MEAN DIAMETERS.									
	16.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
24.0	21	21	21½	21½	22	22	22½	23	23	23½
.1	21	21	21½	22	22	22½	22½	23	23	23½
.2	21	21½	21½	22	22	22½	22½	23	23	23½
.3	21	21½	21½	22	22	22½	23	23	23½	23½
.4	21	21½	22	22	22½	22½	23	23	23½	23½
.5	21½	21½	22	22	22½	22½	23	23	23½	24
.6	21½	21½	22	22	22½	23	23	23½	23½	24
.7	21½	22	22	22½	22½	23	23	23½	23½	24
.8	21½	22	22	22½	22½	23	23	23½	24	24
.9	21½	22	22	22½	23	23	23½	23½	24	24
25.0	22	22	22½	22½	23	23	23½	23½	24	24½
.1	22	22	22½	22½	23	23	23½	24	24	24½
.2	22	22	22½	23	23	23½	23½	24	24	24½
.3	22	22½	22½	23	23	23½	23½	24	24½	24½
.4	22	22½	22½	23	23	23½	24	24	24½	24½
.5	22	22½	23	23	23½	23½	24	24	24½	25
.6	22½	22½	23	23	23½	23½	24	24½	24½	25
.7	22½	22½	23	23	23½	24	24	24½	24½	25
.8	22½	22½	23	23½	23½	24	24	24½	25	25
.9	22½	23	23	23½	23½	24	24½	24½	25	25
26.0	22½	23	23	23½	24	24	24½	24½	25	25
.1	22½	23	23½	23½	24	24	24½	24½	25	25½
.2	23	23	23½	23½	24	24½	24½	25	25	25½
.3	23	23	23½	24	24	24½	24½	25	25	25½
.4	23	23½	23½	24	24	24½	24½	25	25½	25½
.5	23	23½	23½	24	24	24½	25	25	25½	25½
.6	23	23½	23½	24	24½	24½	25	25	25½	26
.7	23	23½	24	24	24½	24½	25	25½	25½	26
.8	23½	23½	24	24	24½	25	25	25½	25½	26
.9	23½	23½	24	24½	24½	25	25	25½	26	26
27.0	23½	24	24	24½	24½	25	25½	25½	26	26
.1	23½	24	24	24½	25	25	25½	25½	26	26½
.2	23½	24	24½	24½	25	25	25½	26	26	26½
.3	24	24	24½	24½	25	25½	25½	26	26	26½
.4	24	24	24½	25	25	25½	25½	26	26½	26½
.5	24	24	24½	25	25	25½	26	26	26½	26½
.6	24	24½	24½	25	25	25½	26	26	26½	27
.7	24	24½	24½	25	25½	25½	26	26½	26½	27
.8	24	24½	25	25	25½	25½	26	26½	26½	27
.9	24½	24½	25	25	25½	26	26	26½	27	27

Lengths.	17. MEAN DIAMETERS.									
	17.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
18.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20.0	19½	20	20	20½	20½	21	21	21½	21½	22
.1	20	20	20	20½	20½	21	21	21½	21½	22
.2	20	20	20½	20½	21	21	21½	21½	22	22
.3	20	20	20½	20½	21	21	21½	21½	22	22
.4	20	20½	20½	21	21	21	21½	21½	22	22
.5	20	20½	20½	21	21	21½	21½	22	22	22½
.6	20	20½	20½	21	21	21½	21½	22	22	22½
.7	20½	20½	21	21	21½	21½	22	22	22½	22½
.8	20½	20½	21	21	21½	21½	22	22	22½	22½
.9	20½	21	21	21½	21½	22	22	22½	22½	23
21.0	20½	21	21	21½	21½	22	22	22½	22½	23
.1	20½	21	21	21½	21½	22	22	22½	22½	23
.2	21	21	21½	21½	22	22	22½	22½	23	23
.3	21	21	21½	21½	22	22	22½	22½	23	23
.4	21	21½	21½	22	22	22½	22½	23	23	23½
.5	21	21½	21½	22	22	22½	22½	23	23	23½
.6	21	21½	21½	22	22	22½	22½	23	23½	23½
.7	21½	21½	22	22	22½	22½	23	23	23½	23½
.8	21½	21½	22	22	22½	22½	23	23	23½	23½
.9	21½	22	22	22½	22½	23	23	23½	23½	24

Lengths.	17. MEAN DIAMETERS.									
	17.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
22.0	21½	22	22	22½	22½	23	23	23½	23½	24
.1	21½	22	22	22½	22½	23	23½	23½	24	24
.2	22	22	22½	22½	23	23	23½	23½	24	24
.3	22	22	22½	22½	23	23	23½	24	24	24½
.4	22	22½	22½	23	23	23½	23½	24	24	24½
.5	22	22½	22½	23	23	23½	23½	24	24	24½
.6	22	22½	22½	23	23½	23½	24	24	24½	24½
.7	22½	22½	23	23	23½	23½	24	24	24½	24½
.8	22½	22½	23	23	23½	23½	24	24½	24½	25
.9	22½	23	23	23½	23½	24	24	24½	24½	25
23.0	22½	23	23	23½	23½	24	24	24½	25	25
.1	22½	23	23	23½	24	24	24½	24½	25	25
.2	23	23	23½	23½	24	24	24½	24½	25	25½
.3	23	23	23½	23½	24	24½	24½	25	25	25½
.4	23	23½	23½	24	24	24½	24½	25	25	25½
.5	23	23½	23½	24	24	24½	24½	25	25½	25½
.6	23	23½	23½	24	24½	24½	25	25	25½	25½
.7	23½	23½	24	24	24½	24½	25	25	25½	26
.8	23½	23½	24	24	24½	25	25	25½	25½	26
.9	23½	24	24	24½	24½	25	25	25½	25½	26
24.0	23½	24	24	24½	24½	25	25½	25½	26	26
.1	23½	24	24	24½	25	25	25½	25½	26	26½
.2	24	24	24½	24½	25	25	25½	26	26	26½
.3	24	24	24½	24½	25	25½	25½	26	26	26½
.4	24	24½	24½	25	25	25½	25½	26	26½	26½
.5	24	24½	24½	25	25	25½	26	26	26½	26½
.6	24	24½	24½	25	25½	25½	26	26	26½	27
.7	24½	24½	25	25	25½	25½	26	26½	26½	27
.8	24½	24½	25	25	25½	26	26	26½	26½	27
.9	24½	25	25	25½	25½	26	26	26½	27	27
25.0	24½	25	25	25½	25½	26	26½	26½	27	27
.1	24½	25	25	25½	26	26	26½	26½	27	27½
.2	25	25	25½	25½	26	26	26½	27	27	27½
.3	25	25	25½	25½	26	26½	26½	27	27½	27½
.4	25	25½	25½	26	26	26½	27	27	27½	27½
.5	25	25½	25½	26	26	26½	27	27	27½	28
.6	25	25½	25½	26	26½	26½	27	27½	27½	28
.7	25½	25½	26	26	26½	27	27	27½	27½	28
.8	25½	25½	26	26½	26½	27	27	27½	28	28
.9	25½	25½	26	26½	26½	27	27½	27½	28	28

Lengths.	17. MEAN DIAMETERS.									
	17.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
26.0	25½	26	26	26½	27	27	27½	27½	28	28½
.1	25½	26	26½	26½	27	27	27½	28	28	28½
.2	25½	26	26½	26½	27	27½	27½	28	28	28½
.3	26	26	26½	27	27	27½	27½	28	28½	28½
.4	26	26	26½	27	27	27½	28	28	28½	29
.5	26	26½	26½	27	27½	27½	28	28	28½	29
.6	26	26½	27	27	27½	27½	28	28½	28½	29
.7	26	26½	27	27	27½	28	28	28½	29	29
.8	26½	26½	27	27½	27½	28	28	28½	29	29
.9	26½	26½	27	27½	27½	28	28½	28½	29	29½
27.0	26½	27	27	27½	28	28	28½	29	29	29½
.1	26½	27	27½	27½	28	28	28½	29	29	29½
.2	26½	27	27½	27½	28	28½	28½	29	29½	29½
.3	27	27	27½	28	28	28½	29	29	29½	29½
.4	27	27	27½	28	28	28½	29	29	29½	30
.5	27	27½	27½	28	28½	28½	29	29½	29½	30
.6	27	27½	28	28	28½	28½	29	29½	29½	30
.7	27	27½	28	28	28½	29	29	29½	30	30
.8	27½	27½	28	28½	28½	29	29½	29½	30	30½
.9	27½	27½	28	28½	28½	29	29½	29½	30	30½
28.0	27½	28	28	28½	29	29	29½	30	30	30½
.1	27½	28	28½	28½	29	29½	29½	30	30½	30½
.2	27½	28	28½	28½	29	29½	29½	30	30½	30½
.3	28	28	28½	29	29	29½	30	30	30½	31
.4	28	28	28½	29	29	29½	30	30½	30½	31
.5	28	28½	28½	29	29½	29½	30	30½	30½	31
.6	28	28½	29	29	29½	30	30	30½	31	31
.7	28	28½	29	29	29½	30	30	30½	31	31½
.8	28½	28½	29	29½	29½	30	30½	30½	31	31½
.9	28½	28½	29	29½	29½	30	30½	31	31	31½
29.0	28½	29	29	29½	30	30	30½	31	31	31½
.1	28½	29	29½	29½	30	30½	30½	31	31½	31½
.2	28½	29	29½	29½	30	30½	31	31	31½	32
.3	29	29	29½	30	30	30½	31	31	31½	32
.4	29	29	29½	30	30½	30½	31	31½	31½	32
.5	29	29½	29½	30	30½	30½	31	31½	32	32
.6	29	29½	30	30	30½	31	31	31½	32	32
.7	29	29½	30	30	30½	31	31½	31½	32	32½
.8	29½	29½	30	30½	30½	31	31½	31½	32	32½
.9	29½	29½	30	30½	31	31	31½	32	32	32½

Lengths.	17. MEAN DIAMETERS.									
	17.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
30.0.....	29½	30	30	30½	31	31	31½	32	32½	32½
.1.....	29½	30	30½	30½	31	31½	31½	32	32½	33
.2.....	29½	30	30½	30½	31	31½	32	32	32½	33
.3.....	30	30	30½	31	31	31½	32	32½	32½	33
.4.....	30	30	30½	31	31½	31½	32	32½	32½	33
.5.....	30	30½	30½	31	31½	32	32	32½	33	33
.6.....	30	30½	31	31	31½	32	32	32½	33	33½
.7.....	30	30½	31	31	31½	32	32½	32½	33	33½
.8.....	30½	30½	31	31½	31½	32	32½	33	33	33½
.9.....	30½	30½	31	31½	32	32	32½	33	33½	33½
31.0.....	30½	31	31	31½	32	32½	32½	33	33½	34
.1.....	30½	31	31½	31½	32	32½	33	33	33½	34
.2.....	30½	31	31½	31½	32	32½	33	33	33½	34
.3.....	31	31	31½	32	32	32½	33	33½	33½	34
.4.....	31	31	31½	32	32½	32½	33	33½	34	34
.5.....	31	31½	31½	32	32½	33	33	33½	34	34½
.6.....	31	31½	32	32	32½	33	33½	33½	34	34½
.7.....	31	31½	32	32½	32½	33	33½	34	34	34½
.8.....	31	31½	32	32½	32½	33	33½	34	34½	34½
.9.....	31½	31½	32	32½	33	33	33½	34	34½	35

Lengths.	18. MEAN DIAMETERS.									
	18.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
21.0.....	23	23½	23½	24	24	24½	24½	25	25	25½
.1.....	23	23½	24	24	24½	24½	25	25	25½	25½
.2.....	23½	23½	24	24	24½	24½	25	25	25½	25½
.3.....	23½	23½	24	24½	24½	25	25	25½	25½	26
.4.....	23½	24	24	24½	24½	25	25	25½	25½	26
.5.....	23½	24	24	24½	24½	25	25½	25½	26	26
.6.....	24	24	24½	24½	25	25	25½	25½	26	26
.7.....	24	24	24½	24½	25	25½	25½	26	26	26½
.8.....	24	24½	24½	25	25	25½	25½	26	26	26½
.9.....	24	24½	24½	25	25	25½	26	26	26½	26½
22.0.....	24	24½	25	25	25½	25½	26	26	26½	26½
.1.....	24½	24½	25	25	25½	25½	26	26½	26½	27
.2.....	24½	24½	25	25½	25½	26	26	26½	26½	27
.3.....	24½	25	25	25½	25½	26	26	26½	27	27
.4.....	24½	25	25	25½	26	26	26½	26½	27	27
.5.....	25	25	25½	25½	26	26	26½	27	27	27½
.6.....	25	25	25½	25½	26	26½	26½	27	27	27½
.7.....	25	25½	25½	26	26	26½	26½	27	27½	27½
.8.....	25	25½	25½	26	26	26½	27	27	27½	27½
.9.....	25	25½	26	26	26½	26½	27	27	27½	28

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
23.0	25½	25½	26	26	26½	27	27	27½	27½	28
.1	25½	25½	26	26½	26½	27	27	27½	28	28
.2	25½	26	26	26½	26½	27	27½	27½	28	28
.3	25½	26	26	26½	27	27	27½	27½	28	28½
.4	26	26	26½	26½	27	27	27½	28	28	28½
.5	26	26	26½	27	27	27½	27½	28	28	28½
.6	26	26½	26½	27	27	27½	28	28	28½	28½
.7	26	26½	26½	27	27½	27½	28	28	28½	29
.8	26	26½	27	27	27½	27½	28	28½	28½	29
.9	26½	26½	27	27	27½	28	28	28½	28½	29
24.0	26½	26½	27	27½	27½	28	28	28½	29	29
.1	26½	27	27	27½	27½	28	28½	28½	29	29½
.2	26½	27	27½	27½	28	28	28½	29	29	29½
.3	27	27	27½	27½	28	28½	28½	29	29	29½
.4	27	27	27½	28	28	28½	28½	29	29½	29½
.5	27	27½	27½	28	28	28½	29	29	29½	30
.6	27	27½	27½	28	28½	28½	29	29	29½	30
.7	27	27½	28	28	28½	28½	29	29½	29½	30
.8	27½	27½	28	28	28½	29	29	29½	30	30
.9	27½	27½	28	28½	28½	29	29½	29½	30	30
25.0	27½	28	28	28½	29	29	29½	29½	30	30½
.1	27½	28	28½	28½	29	29	29½	30	30	30½
.2	28	28	28½	28½	29	29½	29½	30	30½	30½
.3	28	28	28½	29	29	29½	30	30	30½	30½
.4	28	28½	28½	29	29	29½	30	30	30½	31
.5	28	28½	28½	29	29½	29½	30	30½	30½	31
.6	28	28½	29	29	29½	30	30	30½	31	31
.7	28½	28½	29	29½	29½	30	30	30½	31	31
.8	28½	28½	29	29½	29½	30	30½	30½	31	31½
.9	28½	29	29	29½	30	30	30½	31	31	31½
26.0	28½	29	29½	29½	30	30½	30½	31	31	31½
.1	29	29	29½	29½	30	30½	30½	31	31½	31½
.2	29	29	29½	30	30	30½	31	31	31½	32
.3	29	29½	29½	30	30½	30½	31	31½	31½	32
.4	29	29½	29½	30	30½	30½	31	31½	31½	32
.5	29	29½	30	30	30½	31	31	31½	32	32
.6	29½	29½	30	30½	30½	31	31½	31½	32	32½
.7	29½	29½	30	30½	30½	31	31½	31½	32	32½
.8	29½	30	30	30½	31	31	31½	32	32	32½
.9	29½	30	30½	30½	31	31½	31½	32	32½	32½

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
27.0	29½	30	30½	30½	31	31½	32	32	32½	33
.1	30	30	30½	31	31	31½	32	32	32½	33
.2	30	30½	30½	31	31½	31½	32	32½	32½	33
.3	30	30½	30½	31	31½	32	32	32½	33	33
.4	30	30½	31	31	31½	32	32	32½	33	33½
.5	30½	30½	31	31½	31½	32	32½	32½	33	33½
.6	30½	30½	31	31½	32	32	32½	33	33	33½
.7	30½	31	31	31½	32	32	32½	33	33½	33½
.8	30½	31	31½	31½	32	32½	32½	33	33½	34
.9	30½	31	31½	32	32	32½	33	33	33½	34
28.0	31	31	31½	32	32	32½	33	33½	33½	34
.1	31	31½	31½	32	32½	32½	33	33½	34	34
.2	31	31½	32	32	32½	33	33	33½	34	34
.3	31	31½	32	32	32½	33	33½	33½	34	34½
.4	31½	31½	32	32½	32½	33	33½	34	34	34½
.5	31½	31½	32	32½	33	33	33½	34	34	34½
.6	31½	32	32	32½	33	33½	33½	34	34½	34½
.7	31½	32	32½	32½	33	33½	34	34	34½	35
.8	31½	32	32½	33	33	33½	34	34	34½	35
.9	32	32	32½	33	33½	33½	34	34½	34½	35
29.0	32	32½	32½	33	33½	33½	34	34½	35	35
.1	32	32½	33	33	33½	34	34	34½	35	35½
.2	32	32½	33	33	33½	34	34½	34½	35	35½
.3	32½	32½	33	33½	33½	34	34½	35	35	35½
.4	32½	32½	33	33½	34	34	34½	35	35½	35½
.5	32½	33	33	33½	34	34½	34½	35	35½	36
.6	32½	33	33½	33½	34	34½	35	35	35½	36
.7	32½	33	33½	34	34	34½	35	35½	35½	36
.8	33	33	33½	34	34½	34½	35	35½	36	36
.9	33	33½	33½	34	34½	35	35	35½	36	36½
30.0	33	33½	34	34	34½	35	35½	35½	36	36½
.1	33	33½	34	34½	34½	35	35½	36	36	36½
.2	33½	33½	34	34½	35	35	35½	36	36½	36½
.3	33½	34	34	34½	35	35½	35½	36	36½	37
.4	33½	34	34	34½	35	35½	36	36	36½	37
.5	33½	34	34½	34½	35	35½	36	36½	36½	37
.6	33½	34	34½	35	35	35½	36	36½	37	37
.7	34	34	34½	35	35½	35½	36	36½	37	37½
.8	34	34½	34½	35	35½	36	36	36½	37	37½
.9	34	34½	35	35	35½	36	36½	36½	37	37½

Lengths.	18. MEAN DIAMETERS.									
	18.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0	34	34½	35	35½	35½	36	36½	37	37½	37½
.1	34½	34½	35	35½	36	36	36½	37	37½	38
.2	34½	35	35	35½	36	36½	36½	37	37½	38
.3	34½	35	35½	35½	36	36½	37	37	37½	38
.4	34½	35	35½	36	36	36½	37	37½	37½	38
.5	34½	35	35½	36	36½	36½	37	37½	38	38½
.6	35	35	35½	36	36½	37	37	37½	38	38½
.7	35	35½	35½	36	36½	37	37½	37½	38	38½
.8	35	35½	36	36	36½	37	37½	38	38	38½
.9	35	35½	36	36½	36½	37	37½	38	38½	38½
32.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lengths.	19. MEAN DIAMETERS.									
	19.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
22.0	27	27½	27½	28	28	28½	28½	29	29½	29½
.1	27	27½	27½	28	28½	28½	29	29	29½	30
.2	27	27½	28	28	28½	28½	29	29½	29½	30
.3	27½	27½	28	28	28½	29	29	29½	29½	30
.4	27½	28	28	28½	28½	29	29½	29½	30	30
.5	27½	28	28	28½	29	29	29½	29½	30	30½
.6	27½	28	28½	28½	29	29	29½	30	30	30½
.7	28	28	28½	28½	29	29½	29½	30	30½	30½
.8	28	28½	28½	29	29	29½	30	30	30½	30½
.9	28	28½	28½	29	29½	29½	30	30	30½	31
23.0	28	28½	29	29	29½	29½	30	30½	30½	31
.1	28½	28½	29	29½	29½	30	30	30½	31	31
.2	28½	29	29	29½	29½	30	30½	30½	31	31
.3	28½	29	29	29½	30	30	30½	30½	31	31½
.4	28½	29	29½	29½	30	30½	30½	31	31	31½
.5	29	29	29½	30	30	30½	30½	31	31½	31½
.6	29	29½	29½	30	30	30½	31	31	31½	32
.7	29	29½	29½	30	30½	30½	31	31½	31½	32
.8	29	29½	30	30	30½	31	31	31½	31½	32
.9	29½	29½	30	30½	30½	31	31	31½	32	32

Lengths.	19. MEAN DIAMETERS.									
	19.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
24.0	29½	30	30	30½	30½	31	31½	31½	32	32½
.1	29½	30	30	30½	31	31	31½	32	32	32½
.2	29½	30	30½	30½	31	31½	31½	32	32½	32½
.3	30	30	30½	31	31	31½	31½	32	32½	32½
.4	30	30½	30½	31	31	31½	32	32	32½	33
.5	30	30½	30½	31	31½	31½	32	32½	32½	33
.6	30	30½	31	31	31½	32	32	32½	33	33
.7	30½	30½	31	31½	31½	32	32½	32½	33	33½
.8	30½	31	31	31½	31½	32	32½	32½	33	33½
.9	30½	31	31	31½	32	32	32½	33	33	33½
25.0	30½	31	31½	31½	32	32½	32½	33	33½	33½
.1	31	31	31½	32	32	32½	33	33	33½	34
.2	31	31½	31½	32	32	32½	33	33½	33½	34
.3	31	31½	31½	32	32½	32½	33	33½	33½	34
.4	31	31½	32	32	32½	33	33	33½	34	34
.5	31½	31½	32	32½	32½	33	33½	33½	34	34½
.6	31½	32	32	32½	33	33	33½	34	34	34½
.7	31½	32	32	32½	33	33	33½	34	34½	34½
.8	31½	32	32½	32½	33	33½	33½	34	34½	34½
.9	32	32	32½	33	33	33½	34	34	34½	35
26.0	32	32	32½	33	33½	33½	34	34½	34½	35
.1	32	32½	32½	33	33½	33½	34	34½	35	35
.2	32	32½	33	33	33½	34	34	34½	35	35½
.3	32½	32½	33	33½	33½	34	34½	34½	35	35½
.4	32½	32½	33	33½	34	34	34½	35	35	35½
.5	32½	33	33	33½	34	34½	34½	35	35½	35½
.6	32½	33	33½	33½	34	34½	34½	35	35½	36
.7	33	33	33½	34	34	34½	35	35	35½	36
.8	33	33	33½	34	34½	34½	35	35½	35½	36
.9	33	33½	33½	34	34½	35	35	35½	36	36
27.0	33	33½	34	34	34½	35	35½	35½	36	36½
.1	33½	33½	34	34½	34½	35	35½	36	36	36½
.2	33½	33½	34	34½	35	35	35½	36	36½	36½
.3	33½	34	34	34½	35	35½	35½	36	36½	37
.4	33½	34	34½	34½	35	35½	36	36	36½	37
.5	34	34	34½	35	35	35½	36	36½	36½	37
.6	34	34	34½	35	35½	35½	36	36½	37	37
.7	34	34½	34½	35	35½	36	36	36½	37	37½
.8	34	34½	35	35	35½	36	36½	36½	37	37½
.9	34	34½	35	35½	35½	36	36½	37	37	37½

Lengths	19. MEAN DIAMETERS.									
	19.0	.1	.2	.3	.4	.5	.6	.7	8.	.9
28.0	34½	34½	35	35½	36	36	36½	37	37½	37½
.1	34½	35	35	35½	36	36½	36½	37	37½	38
.2	34½	35	35½	35½	36	36½	37	37	37½	38
.3	34½	35	35½	36	36	36½	37	37½	37½	38
.4	35	35	35½	36	36½	36½	37	37½	38	38
.5	35	35½	35½	36	36½	37	37	37½	38	38½
.6	35	35½	36	36	36½	37	37½	37½	38	38½
.7	35	35½	36	36½	36½	37	37½	38	38½	38½
.8	35½	35½	36	36½	37	37	37½	38	38½	39
.9	35½	36	36	36½	37	37½	37½	38	38½	39
29.0	35½	36	36½	36½	37	37½	38	38½	38½	39
.1	35½	36	36½	37	37	37½	38	38½	39	39
.2	36	36	36½	37	37½	38	38	38½	39	39½
.3	36	36½	36½	37	37½	38	38½	38½	39	39½
.4	36	36½	37	37	37½	38	38½	39	39	39½
.5	36	36½	37	37½	37½	38	38½	39	39½	39½
.6	36½	36½	37	37½	38	38½	38½	39	39½	40
.7	36½	37	37	37½	38	38½	39	39	39½	40
.8	36½	37	37½	37½	38	38½	39	39½	39½	40
.9	36½	37	37½	38	38½	38½	39	39½	40	40½
30.0	37	37	37½	38	38½	39	39	39½	40	40½
.1	37	37½	37½	38	38½	39	39½	39½	40	40½
.2	37	37½	38	38	38½	39	39½	40	40½	40½
.3	37	37½	38	38½	39	39	39½	40	40½	41
.4	37½	37½	38	38½	39	39½	39½	40	40½	41
.5	37½	38	38	38½	39	39½	40	40	40½	41
.6	37½	38	38½	39	39	39½	40	40½	41	41
.7	37½	38	38½	39	39½	39½	40	40½	41	41½
.8	38	38	38½	39	39½	40	40	40½	41	41½
.9	38	38½	38½	39	39½	40	40½	41	41	41½
31.0	38	38½	39	39½	39½	40	40½	41	41½	41½
.1	38	38½	39	39½	40	40	40½	41	41½	42
.2	38½	38½	39	39½	40	40½	41	41	41½	42
.3	38½	39	39	39½	40	40½	41	41½	41½	42
.4	38½	39	39½	40	40	40½	41	41½	42	42½
.5	38½	39	39½	40	40½	40½	41	41½	42	42½
.6	39	39	39½	40	40½	41	41½	41½	42	42½
.7	39	39½	39½	40	40½	41	41½	42	42½	42½
.8	39	39½	40	40½	40½	41	41½	42	42½	43
.9	39	39½	40	40½	41	41	41½	42	42½	43

Lengths.	19. MEAN DIAMETERS.									
	19.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
32.0	39½	39½	40	40½	41	41½	42	42	42½	43
.1	39½	40	40	40½	41	41½	42	42½	43	43
.2	39½	40	40½	41	41	41½	42	42½	43	43½
.3	39½	40	40½	41	41½	42	42	42½	43	43½
.4	40	40	40½	41	41½	42	42½	43	43	43½
.5	40	40½	40½	41	41½	42	42½	43	43½	44
.6	40	40½	41	41½	41½	42	42½	43	43½	44
.7	40	40½	41	41½	42	42½	42½	43	43½	44
.8	40½	40½	41	41½	42	42½	43	43½	43½	44
.9	40½	41	41	41½	42	42½	43	43½	44	44½

Lengths.	20. MEAN DIAMETERS.									
	20.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
23.0	31½	31½	32	32	32½	33	33	33½	34	34
.1	31½	31½	32	32½	32½	33	33½	33½	34	34½
.2	31½	32	32	32½	33	33	33½	34	34	34½
.3	31½	32	32½	32½	33	33½	33½	34	34½	34½
.4	32	32	32½	33	33	33½	34	34	34½	35
.5	32	32½	32½	33	33½	33½	34	34	34½	35
.6	32	32½	32½	33	33½	33½	34	34½	34½	35
.7	32	32½	33	33	33½	34	34	34½	35	35
.8	32½	32½	33	33½	33½	34	34½	34½	35	35½
.9	32½	33	33	33½	34	34	34½	35	35	35½
24.0	32½	33	33½	33½	34	34½	34½	35	35½	35½
.1	33	33	33½	34	34	34½	35	35	35½	36
.2	33	33	33½	34	34	34½	35	35½	35½	36
.3	33	33½	33½	34	34½	34½	35	35½	35½	36
.4	33	33½	34	34	34½	35	35	35½	36	36
.5	33½	33½	34	34½	34½	35	35½	35½	36	36½
.6	33½	34	34	34½	35	35	35½	36	36	36½
.7	33½	34	34½	34½	35	35½	35½	36	36½	36½
.8	33½	34	34½	34½	35	35½	36	36	36½	37
.9	34	34	34½	35	35	35½	36	36½	36½	37

Lengths.	20. MEAN DIAMETERS.									
	20.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
25.0.....	34	34½	34½	35	35½	35½	36	36½	37	37
.1.....	34	34½	35	35	35½	36	36	36½	37	37½
.2.....	34½	34½	35	35½	35½	36	36½	36½	37	37½
.3.....	34½	35	35	35½	36	36	36½	37	37	37½
.4.....	34½	35	35	35½	36	36½	36½	37	37½	37½
.5.....	34½	35	35½	35½	36	36½	37	37	37½	38
.6.....	35	35	35½	36	36	36½	37	37½	37½	38
.7.....	35	35½	35½	36	36½	36½	37	37½	38	38
.8.....	35	35½	36	36	36½	37	37	37½	38	38½
.9.....	35	35½	36	36½	36½	37	37½	37½	38	38½
26.0.....	35½	35½	36	36½	37	37	37½	38	38	38½
.1.....	35½	36	36	36½	37	37½	37½	38	38½	39
.2.....	35½	36	36½	36½	37	37½	38	38	38½	39
.3.....	36	36	36½	37	37	37½	38	38½	38½	39
.4.....	36	36½	36½	37	37½	37½	38	38½	39	39
.5.....	36	36½	37	37	37½	38	38	38½	39	39½
.6.....	36	36½	37	37½	37½	38	38½	39	39	39½
.7.....	36½	36½	37	37½	38	38	38½	39	39½	39½
.8.....	36½	37	37	37½	38	38½	38½	39	39½	40
.9.....	36½	37	37½	37½	38	38½	39	39	39½	40
27.0.....	36½	37	37½	38	38	38½	39	39½	39½	40
.1.....	37	37	37½	38	38½	38½	39	39½	40	40
.2.....	37	37½	37½	38	38½	39	39	39½	40	40½
.3.....	37	37½	38	38½	38½	39	39½	40	40	40½
.4.....	37½	37½	38	38½	39	39	39½	40	40½	40½
.5.....	37½	38	38	38½	39	39½	39½	40	40½	41
.6.....	37½	38	38½	38½	39	39½	40	40	40½	41
.7.....	37½	38	38½	39	39	39½	40	40½	40½	41
.8.....	38	38	38½	39	39½	39½	40	40½	41	41½
.9.....	38	38½	38½	39	39½	40	40½	40½	41	41½
28.0.....	38	38½	39	39	39½	40	40½	41	41	41½
.1.....	38	38½	39	39½	40	40	40½	41	41½	41½
.2.....	38½	38½	39	39½	40	40½	40½	41	41½	42
.3.....	38½	39	39½	39½	40	40½	41	41	41½	42
.4.....	38½	39	39½	40	40	40½	41	41½	42	42
.5.....	39	39	39½	40	40½	40½	41	41½	42	42½
.6.....	39	39½	39½	40	40½	41	41½	41½	42	42½
.7.....	39	39½	40	40	40½	41	41½	42	42	42½
.8.....	39	39½	40	40½	41	41	41½	42	42½	43
.9.....	39½	39½	40	40½	41	41½	41½	42	42½	43

Lengths.	20. MEAN DIAMETERS.									
	20.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
29.0	39½	40	40	40½	41	41½	42	42	42½	43
.1	39½	40	40½	41	41	41½	42	42½	43	43
.2	39½	40	40½	41	41½	41½	42	42½	43	43½
.3	40	40	40½	41	41½	42	42½	42½	43	43½
.4	40	40½	41	41	41½	42	42½	43	43	43½
.5	40	40½	41	41½	41½	42	42½	43	43½	44
.6	40½	40½	41	41½	42	42½	42½	43	43½	44
.7	40½	41	41	41½	42	42½	43	43½	43½	44
.8	40½	41	41½	42	42	42½	43	43½	44	44½
.9	40½	41	41½	42	42½	42½	43	43½	44	44½
30.0	41	41	41½	42	42½	43	43½	43½	44	44½
.1	41	41½	42	42	42½	43	43½	44	44½	44½
.2	41	41½	42	42½	42½	43	43½	44	44½	45
.3	41	41½	42	42½	43	43½	43½	44	44½	45
.4	41½	42	42	42½	43	43½	44	44½	44½	45
.5	41½	42	42½	42½	43	43½	44	44½	45	45½
.6	41½	42	42½	43	43½	43½	44	44½	45	45½
.7	42	42	42½	43	43½	44	44½	44½	45	45½
.8	42	42½	42½	43	43½	44	44½	45	45½	45½
.9	42	42½	43	43½	43½	44	44½	45	45½	46
31.0	42	42½	43	43½	44	44½	44½	45	45½	46
.1	42½	42½	43	43½	44	44½	45	45½	45½	46
.2	42½	43	43½	43½	44	44½	45	45½	46	46½
.3	42½	43	43½	44	44½	44½	45	45½	46	46½
.4	42½	43	43½	44	44½	45	45½	45½	46	46½
.5	43	43½	43½	44	44½	45	45½	46	46½	47
.6	43	43½	44	44½	44½	45	45½	46	46½	47
.7	43	43½	44	44½	45	45½	45½	46	46½	47
.8	43	43½	44	44½	45	45½	46	46½	47	47
.9	43½	44	44½	44½	45	45½	46	46½	47	47½
32.0	43½	44	44½	45	45½	45½	46	46½	47	47½
.1	43½	44	44½	45	45½	46	46½	47	47	47½
.2	44	44	44½	45	45½	46	46½	47	47½	48
.3	44	44½	45	45½	45½	46	46½	47	47½	48
.4	44	44½	45	45½	46	46½	46½	47	47½	48
.5	44	44½	45	45½	46	46½	47	47½	48	48½
.6	44½	45	45	45½	46	46½	47	47½	48	48½
.7	44½	45	45½	46	46½	46½	47	47½	48	48½
.8	44½	45	45½	46	46½	47	47½	48	48	48½
.9	44½	45	45½	46	46½	47	47½	48	48½	49

Lengths.	20. MEAN DIAMETERS.									
	20.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	45	45½	46	46	46½	47	47½	48	48½	49
.1	45	45½	46	46½	47	47½	48	48	48½	49
.2	45	45½	46	46½	47	47½	48	48½	49	49½
.3	45½	45½	46	46½	47	47½	48	48½	49	49½
.4	45½	46	46½	47	47½	47½	48	48½	49	49½
.5	45½	46	46½	47	47½	48	48½	49	49½	50
.6	45½	46	46½	47	47½	48	48½	49	49½	50
.7	46	46½	47	47	47½	48	48½	49	49½	50
.8	46	46½	47	47½	48	48½	49	49	49½	50
.9	46	46½	47	47½	48	48½	49	49½	50	50½

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
24.0	36	36½	36½	37	37½	37½	38	38½	39	39
.1	36	36½	37	37	37½	38	38	38½	39	39½
.2	36½	36½	37	37½	37½	38	38½	38½	39	39½
.3	36½	37	37	37½	38	38	38½	39	39½	39½
.4	36½	37	37½	37½	38	38½	38½	39	39½	40
.5	36½	37	37½	38	38	38½	39	39	39½	40
.6	37	37	37½	38	38½	38½	39	39½	39½	40
.7	37	37½	37½	38	38½	39	39	39½	40	40½
.8	37	37½	38	38½	38½	39	39½	39½	40	40½
.9	37½	37½	38	38½	39	39	39½	40	40	40½
25.0	37½	38	38	38½	39	39½	39½	40	40½	41
.1	37½	38	38½	38½	39	39½	40	40	40½	41
.2	38	38	38½	39	39	39½	40	40½	40½	41
.3	38	38½	38½	39	39½	40	40	40½	41	41½
.4	38	38½	39	39	39½	40	40½	40½	41	41½
.5	38	38½	39	39½	39½	40	40½	41	41	41½
.6	38½	39	39	39½	40	40	40½	41	41½	41½
.7	38½	39	39½	39½	40	40½	41	41	41½	42
.8	38½	39	39½	40	40	40½	41	41½	41½	42
.9	39	39	39½	40	40½	40½	41	41½	42	42
26.0	39	39½	39½	40	40½	41	41	41½	42	42½
.1	39	39½	40	40½	40½	41	41½	42	42	42½
.2	39½	39½	40	40½	41	41	41½	42	42½	42½
.3	39½	40	40	40½	41	41½	41½	42	42½	43
.4	39½	40	40½	40½	41	41½	42	42½	42½	43
.5	39½	40	40½	41	41½	41½	42	42½	43	43
.6	40	40½	40½	41	41½	42	42	42½	43	43½
.7	40	40½	41	41	41½	42	42½	42½	43	43½
.8	40	40½	41	41½	41½	42	42½	43	43½	43½
.9	40½	40½	41	41½	42	42½	42½	43	43½	44

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
27.0	40½	41	41½	41½	42	42½	43	43	43½	44
.1	40½	41	41½	42	42	42½	43	43½	44	44
.2	41	41	41½	42	42½	42½	43	43½	44	44½
.3	41	41½	41½	42	42½	43	43½	43½	44	44½
.4	41	41½	42	42½	42½	43	43½	44	44½	44½
.5	41	41½	42	42½	43	43	43½	44	44½	45
.6	41½	42	42	42½	43	43½	44	44	44½	45
.7	41½	42	42½	42½	43	43½	44	44½	45	45
.8	41½	42	42½	43	43½	43½	44	44½	45	45½
.9	42	42	42½	43	43½	44	44½	44½	45	45½
28.0	42	42½	43	43	43½	44	44½	45	45	45½
.1	42	42½	43	43½	44	44	44½	45	45½	46
.2	42½	42½	43	43½	44	44½	44½	45	45½	46
.3	42½	43	43	43½	44	44½	45	45½	45½	46
.4	42½	43	43½	44	44	44½	45	45½	46	46½
.5	42½	43	43½	44	44½	45	45	45½	46	46½
.6	43	43½	43½	44	44½	45	45½	46	46	46½
.7	43	43½	44	44½	44½	45	45½	46	46½	47
.8	43	43½	44	44½	45	45½	45½	46	46½	47
.9	43½	43½	44	44½	45	45½	46	46½	46½	47
29.0	43½	44	44½	44½	45	45½	46	46½	47	47½
.1	43½	44	44½	45	45½	45½	46	46½	47	47½
.2	44	44	44½	45	45½	46	46½	46½	47	47½
.3	44	44½	45	45	45½	46	46½	47	47½	48
.4	44	44½	45	45½	46	46	46½	47	47½	48
.5	44	44½	45	45½	46	46½	47	47	47½	48
.6	44½	45	45	45½	46	46½	47	47½	48	48½
.7	44½	45	45½	46	46	46½	47	47½	48	48½
.8	44½	45	45½	46	46½	47	47½	47½	48	48½
.9	45	45½	45½	46	46½	47	47½	48	48½	49
30.0	45	45½	46	46½	46½	47	47½	48	48½	49
.1	45	45½	46	46½	47	47½	47½	48	48½	49
.2	45½	45½	46	46½	47	47½	48	48½	49	49
.3	45½	46	46½	46½	47	47½	48	48½	49	49½
.4	45½	46	46½	47	47½	48	48	48½	49	49½
.5	45½	46	46½	47	47½	48	48½	49	49½	49½
.6	46	46½	47	47	47½	48	48½	49	49½	50
.7	46	46½	47	47½	48	48	48½	49	49½	50
.8	46	46½	47	47½	48	48½	49	49½	50	50
.9	46½	47	47	47½	48	48½	49	49½	50	50½

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0.....	46½	47	47½	48	48½	48½	49	49½	50	50½
.1.....	46½	47	47½	48	48½	49	49½	50	50½	50½
.2.....	47	47	47½	48	48½	49	49½	50	50½	51
.3.....	47	47½	48	48½	48½	49	49½	50	50½	51
.4.....	47	47½	48	48½	49	49½	50	50½	50½	51
.5.....	47	47½	48	48½	49	49½	50	50½	51	51½
.6.....	47½	48	48½	48½	49	49½	50	50½	51	51½
.7.....	47½	48	48½	49	49½	50	50½	51	51	51½
.8.....	47½	48	48½	49	49½	50	50½	51	51½	52
.9.....	48	48½	48½	49	49½	50	50½	51	51½	52
32.0.....	48	48½	49	49½	50	50½	51	51	51½	52
.1.....	48	48½	49	49½	50	50½	51	51½	52	52½
.2.....	48½	48½	49	49½	50	50½	51	51½	52	52½
.3.....	48½	49	49½	50	50½	51	51	51½	52	52½
.4.....	48½	49	49½	50	50½	51	51½	52	52½	53
.5.....	48½	49	49½	50	50½	51	51½	52	52½	53
.6.....	49	49½	50	50½	51	51	51½	52	52½	53
.7.....	49	49½	50	50½	51	51½	52	52½	53	53½
.8.....	49	49½	50	50½	51	51½	52	52½	53	53½
.9.....	49½	50	50½	50½	51	51½	52	52½	53	53½
33.0.....	49½	50	50½	51	51½	52	52½	53	53½	54
.1.....	49½	50	50½	51	51½	52	52½	53	53½	54
.2.....	50	50½	50½	51	51½	52	52½	53	53½	54
.3.....	50	50½	51	51½	52	52½	53	53½	54	54½
.4.....	50	50½	51	51½	52	52½	53	53½	54	54½
.5.....	50	50½	51	51½	52	52½	53	53½	54	54½
.6.....	50½	51	51½	52	52½	53	53½	54	54½	55
.7.....	50½	51	51½	52	52½	53	53½	54	54½	55
.8.....	50½	51	51½	52	52½	53	53½	54	54½	55
.9.....	51	51½	52	52½	53	53½	54	54½	55	55½
34.0.....	51	51½	52	52½	53	53½	54	54½	55	55½
.1.....	51	51½	52	52½	53	53½	54	54½	55	55½
.2.....	51½	52	52½	53	53½	54	54½	55	55½	56
.3.....	51½	52	52½	53	53½	54	54½	55	55½	56
.4.....	51½	52	52½	53	53½	54	54½	55	55½	56
.5.....	51½	52	52½	53	53½	54	54½	55	55½	56½
.6.....	52	52½	53	53½	54	54½	55	55½	56	56½
.7.....	52	52½	53	53½	54	54½	55	55½	56	56½
.8.....	52	52½	53	53½	54	54½	55	55½	56	56½
.9.....	52½	53	53½	54	54½	55	55½	56	56½	57

Lengths.	21. MEAN DIAMETERS.									
	21.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
35.0.....	52½	53	53½	54	54½	55	55½	56	56½	57
.1.....	52½	53	53½	54	54½	55	55½	56	56½	57
.2.....	53	53½	54	54½	55	55½	56	56½	57	57½
.3.....	53	53½	54	54½	55	55½	56	56½	57	57½
.4.....	53	53½	54	54½	55	55½	56	56½	57	57½
.5.....	53	53½	54	55	55½	56	56½	57	57½	58
.6.....	53½	54	54½	55	55½	56	56½	57	57½	58
.7.....	53½	54	54½	55	55½	56	56½	57	57½	58
.8.....	53½	54	54½	55	55½	56½	57	57½	58	58½
.9.....	54	54½	55	55½	56	56½	57	57½	58	58½

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
25.0.....	41	41½	42	42½	42½	43	43½	44	44	44½
.1.....	41½	41½	42	42½	43	43	43½	44	44½	45
.2.....	41½	42	42	42½	43	43½	44	44	44½	45
.3.....	41½	42	42½	43	43	43½	44	44½	44½	45
.4.....	42	42	42½	43	43½	43½	44	44½	45	45½
.5.....	42	42½	42½	43	43½	44	44½	44½	45	45½
.6.....	42	42½	43	43½	43½	44	44½	45	45	45½
.7.....	42½	42½	43	43½	44	44	44½	45	45½	46
.8.....	42½	43	43	43½	44	44½	45	45	45½	46
.9.....	42½	43	43½	44	44	44½	45	45½	46	46
26.0.....	43	43	43½	44	44½	45	45	45½	46	46½
.1.....	43	43½	43½	44	44½	45	45½	45½	46	46½
.2.....	43	43½	44	44½	44½	45	45½	46	46½	46½
.3.....	43½	43½	44	44½	45	45½	45½	46	46½	47
.4.....	43½	44	44	44½	45	45½	46	46½	46½	47
.5.....	43½	44	44½	45	45	45½	46	46½	47	47
.6.....	44	44	44½	45	45½	46	46	46½	47	47½
.7.....	44	44½	44½	45	45½	46	46½	47	47	47½
.8.....	44	44½	45	45½	45½	46	46½	47	47½	48
.9.....	44½	44½	45	45½	46	46½	46½	47	47½	48
27.0.....	44½	45	45	45½	46	46½	47	47½	47½	48
.1.....	44½	45	45½	46	46	46½	47	47½	48	48½
.2.....	45	45	45½	46	46½	47	47	47½	48	48½
.3.....	45	45½	45½	46	46½	47	47½	48	48½	48½
.4.....	45	45½	46	46½	46½	47	47½	48	48½	49
.5.....	45½	45½	46	46½	47	47½	48	48	48½	49
.6.....	45½	46	46	46½	47	47½	48	48½	49	49
.7.....	45½	46	46½	47	47½	47½	48	48½	49	49½
.8.....	45½	46	46½	47	47½	48	48½	48½	49	49½
.9.....	46	46½	47	47	47½	48	48½	49	49½	49½

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
28.0	46	46½	47	47½	48	48	48½	49	49½	50
.1	46	46½	47	47½	48	48½	49	49	49½	50
.2	46½	47	47½	47½	48	48½	49	49½	50	50½
.3	46½	47	47½	48	48½	48½	49	49½	50	50½
.4	46½	47	47½	48	48½	49	49½	50	50	50½
.5	47	47½	48	48	48½	49	49½	50	50½	51
.6	47	47½	48	48½	49	49	49½	50	50½	51
.7	47	47½	48	48½	49	49½	50	50½	50½	51
.8	47½	48	48½	48½	49	49½	50	50½	51	51½
.9	47½	48	48½	49	49½	49½	50	50½	51	51½
29.0	47½	48	48½	49	49½	50	50½	51	51½	51½
.1	48	48½	49	49	49½	50	50½	51	51½	52
.2	48	48½	49	49½	50	50½	50½	51	51½	52
.3	48	48½	49	49½	50	50½	51	51½	52	52
.4	48½	49	49½	49½	50	50½	51	51½	52	52½
.5	48½	49	49½	50	50½	51	51	51½	52	52½
.6	48½	49	49½	50	50½	51	51½	52	52½	53
.7	49	49½	50	50	50½	51	51½	52	52½	53
.8	49	49½	50	50½	51	51½	52	52	52½	53
.9	49	49½	50	50½	51	51½	52	52½	53	53½
30.0	49½	50	50½	50½	51	51½	52	52½	53	53½
.1	49½	50	50½	51	51½	52	52½	52½	53	53½
.2	49½	50	50½	51	51½	52	52½	53	53½	54
.3	50	50½	51	51	51½	52	52½	53	53½	54
.4	50	50½	51	51½	52	52½	53	53½	53½	54
.5	50	50½	51	51½	52	52½	53	53½	54	54½
.6	50½	51	51½	51½	52	52½	53	53½	54	54½
.7	50½	51	51½	52	52½	53	53½	54	54½	54½
.8	50½	51	51½	52	52½	53	53½	54	54½	55
.9	51	51½	52	52	52½	53	53½	54	54½	55
31.0	51	51½	52	52½	53	53½	54	54½	55	55½
.1	51	51½	52	52½	53	53½	54	54½	55	55½
.2	51½	52	52½	53	53	53½	54	54½	55	55½
.3	51½	52	52½	53	53½	54	54½	55	55½	56
.4	51½	52	52½	53	53½	54	54½	55	55½	56
.5	52	52½	53	53½	53½	54	54½	55	55½	56
.6	52	52½	53	53½	54	54½	55	55½	56	56½
.7	52	52½	53	53½	54	54½	55	55½	56	56½
.8	52½	53	53½	54	54½	54½	55	55½	56	56½
.9	52½	53	53½	54	54½	55	55½	56	56½	57

Lengths.	22. MEAN DIAMETERS.									
	22.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
32.0	52½	53	53½	54	54½	55	55½	56	56½	57
.1	53	53½	54	54½	55	55½	55½	56	56½	57
.2	53	53½	54	54½	55	55½	56	56½	57	57½
.3	53	53½	54	54½	55	55½	56	56½	57	57½
.4	53½	54	54½	55	55½	56	56½	57	57½	58
.5	53½	54	54½	55	55½	56	56½	57	57½	58
.6	53½	54	54½	55	55½	56	56½	57	57½	58
.7	54	54½	55	55½	56	56½	57	57½	58	58½
.8	54	54½	55	55½	56	56½	57	57½	58	58½
.9	54	54½	55	55½	56	56½	57	57½	58	58½
33.0	54½	55	55½	56	56½	57	57½	58	58½	59
.1	54½	55	55½	56	56½	57	57½	58	58½	59
.2	54½	55	55½	56	56½	57	57½	58	58½	59
.3	55	55½	56	56½	57	57½	58	58½	59	59½
.4	55	55½	56	56½	57	57½	58	58½	59	59½
.5	55	55½	56	56½	57	57½	58	58½	59	59½
.6	55½	56	56½	57	57½	58	58½	59	59½	60
.7	55½	56	56½	57	57½	58	58½	59	59½	60
.8	55½	56	56½	57	57½	58	58½	59	59½	60½
.9	56	56½	57	57½	58	58½	59	59½	60	60½
34.0	56	56½	57	57½	58	58½	59	59½	60	60½
.1	56	56½	57	57½	58	58½	59	59½	60½	61
.2	56½	57	57½	58	58½	59	59½	60	60½	61
.3	56½	57	57½	58	58½	59	59½	60	60½	61
.4	56½	57	57½	58	58½	59	59½	60½	61	61½
.5	57	57½	58	58½	59	59½	60	60½	61	61½
.6	57	57½	58	58½	59	59½	60	60½	61	61½
.7	57	57½	58	58½	59	59½	60½	61	61½	62
.8	57½	58	58½	59	59½	60	60½	61	61½	62
.9	57½	58	58½	59	59½	60	60½	61	61½	62
35.0	57½	58	58½	59	59½	60	61	61½	62	62½
.1	58	58½	59	59½	60	60½	61	61½	62	62½
.2	58	58½	59	59½	60	60½	61	61½	62	63
.3	58	58½	59	59½	60	61	61½	62	62½	63
.4	58½	59	59½	60	60½	61	61½	62	62½	63
.5	58½	59	59½	60	60½	61	61½	62	62½	63½
.6	58½	59	59½	60	60½	61½	62	62½	63	63½
.7	58½	59½	60	60½	61	61½	62	62½	63	63½
.8	59	59½	60	60½	61	61½	62	62½	63½	64
.9	59	59½	60	60½	61	62	62½	63	63½	64

Lengths.	22. MEAN DIAMETERS.									
	22.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
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Lengths.	23. MEAN DIAMETERS.									
	23.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
26.0.....	47	47	47½	48	48½	49	49	49½	50	50½
.1.....	47	47½	48	48	48½	49	49½	50	50½	50½
.2.....	47	47½	48	48½	49	49	49½	50	50½	51
.3.....	47½	47½	48	48½	49	49½	50	50	50½	51
.4.....	47½	48	48½	48½	49	49½	50	50½	51	51½
.5.....	47½	48	48½	49	49½	50	50	50½	51	51½
.6.....	48	48½	48½	49	49½	50	50½	51	51	51½
.7.....	48	48½	49	49½	49½	50	50½	51	51½	52
.8.....	48	48½	49	49½	50	50½	51	51	51½	52
.9.....	48½	49	49	49½	50	50½	51	51½	52	52
27.0.....	48½	49	49½	50	50½	50½	51	51½	52	52½
.1.....	48½	49	49½	50	50½	51	51½	52	52	52½
.2.....	49	49½	50	50	50½	51	51½	52	52½	53
.3.....	49	49½	50	50½	51	51½	51½	52	52½	53
.4.....	49½	49½	50	50½	51	51½	52	52½	53	53
.5.....	49½	50	50½	51	51	51½	52	52½	53	53½
.6.....	49½	50	50½	51	51½	52	52½	52½	53	53½
.7.....	50	50½	50½	51	51½	52	52½	53	53½	54
.8.....	50	50½	51	51½	52	52	52½	53	53½	54
.9.....	50	50½	51	51½	52	52½	53	53½	53½	54
28.0.....	50½	51	51	51½	52	52½	53	53½	54	54½
.1.....	50½	51	51½	52	52½	53	53	53½	54	54½
.2.....	50½	51	51½	52	52½	53	53½	54	54½	55
.3.....	51	51½	52	52	52½	53	53½	54	54½	55
.4.....	51	51½	52	52½	53	53½	54	54	54½	55
.5.....	51½	51½	52	52½	53	53½	54	54½	55	55½
.6.....	51½	52	52½	53	53	53½	54	54½	55	55½
.7.....	51½	52	52½	53	53½	54	54½	55	55½	55½
.8.....	52	52½	52½	53	53½	54	54½	55	55½	56
.9.....	52	52½	53	53½	54	54½	54½	55	55½	56

Lengths.	23. MEAN DIAMETERS.									
	23.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
29.0	52	52½	53	53½	54	54½	55	55½	56	56½
.1	52½	53	53½	54	54	54½	55	55½	56	56½
.2	52½	53	53½	54	54½	55	55½	56	56	56½
.3	52½	53	53½	54	54½	55	55½	56	56½	57
.4	53	53½	54	54½	54½	55	55½	56	56½	57
.5	53	53½	54	54½	55	55½	56	56½	57	57½
.6	53	53½	54	54½	55	55½	56	56½	57	57½
.7	53½	54	54½	55	55½	56	56	56½	57	57½
.8	53½	54	54½	55	55½	56	56½	57	57½	58
.9	54	54	54½	55	55½	56	56½	57	57½	58
30.0	54	54½	55	55½	56	56½	57	57½	58	58½
.1	54	54½	55	55½	56	56½	57	57½	58	58½
.2	54½	55	55½	55½	56	56½	57	57½	58	58½
.3	54½	55	55½	56	56½	57	57½	58	58½	59
.4	54½	55	55½	56	56½	57	57½	58	58½	59
.5	55	55½	56	56½	57	57½	58	58	58½	59
.6	55	55½	56	56½	57	57½	58	58½	59	59½
.7	55	55½	56	56½	57	57½	58	58½	59	59½
.8	55½	56	56½	57	57½	58	58½	59	59½	60
.9	55½	56	56½	57	57½	58	58½	59	59½	60
31.0	56	56	56½	57	57½	58	58½	59	59½	60
.1	56	56½	57	57½	58	58½	59	59½	60	60½
.2	56	56½	57	57½	58	58½	59	59½	60	60½
.3	56½	57	57½	58	58½	59	59½	60	60½	61
.4	56½	57	57½	58	58½	59	59½	60	60½	61
.5	56½	57	57½	58	58½	59	59½	60	60½	61
.6	57	57½	58	58½	59	59½	60	60½	61	61½
.7	57	57½	58	58½	59	59½	60	60½	61	61½
.8	57	57½	58	58½	59	59½	60	60½	61	62
.9	57½	58	58½	59	59½	60	60½	61	61½	62
32.0	57½	58	58½	59	59½	60	60½	61	61½	62
.1	57½	58	58½	59½	60	60½	61	61½	62	62½
.2	58	58½	59	59½	60	60½	61	61½	62	62½
.3	58	58½	59	59½	60	60½	61	61½	62	62½
.4	58½	59	59½	60	60½	61	61½	62	62½	63
.5	58½	59	59½	60	60½	61	61½	62	62½	63
.6	58½	59	59½	60	60½	61	61½	62½	63	63½
.7	59	59½	60	60½	61	61½	62	62½	63	63½
.8	59	59½	60	60½	61	61½	62	62½	63	63½
.9	59	59½	60	60½	61½	62	62½	63	63½	64

Lengths.	23. MEAN DIAMETERS.									
	23.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	59½	60	60½	61	61½	62	62½	63	63½	64
.1	59½	60	60½	61	61½	62	62½	63	63½	64½
.2	59½	60	61	61½	62	62½	63	63½	64	64½
.3	60	60½	61	61½	62	62½	63	63½	64	64½
.4	60	60½	61	61½	62	62½	63	64	64½	65
.5	60½	61	61½	62	62½	63	63½	64	64½	65
.6	60½	61	61½	62	62½	63	63½	64	64½	65½
.7	60½	61	61½	62	62½	63½	64	64½	65	65½
.8	61	61½	62	62½	63	63½	64	64½	65	65½
.9	61	61½	62	62½	63	63½	64	64½	65½	66
34.0	61	61½	62	63	63½	64	64½	65	65½	66
.1	61½	62	62½	63	63½	64	64½	65	65½	66
.2	61½	62	62½	63	63½	64	65	65½	66	66½
.3	61½	62	63	63½	64	64½	65	65½	66	66½
.4	62	62½	63	63½	64	64½	65	65½	66½	67
.5	62	62½	63	63½	64	65	65½	66	66½	67
.6	62	63	63½	64	64½	65	65½	66	66½	67
.7	62½	63	63½	64	64½	65	65½	66½	67	67½
.8	62½	63	63½	64	65	65½	66	66½	67	67½
.9	63	63½	64	64½	65	65½	66	66½	67	68
35.0	63	63½	64	64½	65	65½	66½	67	67½	68
.1	63	63½	64	65	65½	66	66½	67	67½	68
.2	63½	64	64½	65	65½	66	66½	67	68	68½
.3	63½	64	64½	65	65½	66½	67	67½	68	68½
.4	63½	64	65	65½	66	66½	67	67½	68	69
.5	64	64½	65	65½	66	66½	67	68	68½	69
.6	64	64½	65	65½	66½	67	67½	68	68½	69
.7	64	65	65½	66	66½	67	67½	68	69	69½
.8	64½	65	65½	66	66½	67	68	68½	69	69½
.9	64½	65	65½	66½	67	67½	68	68½	69	69½
36.0	64½	65½	66	66½	67	67½	68	69	69½	70
.1	65	65½	66	66½	67	68	68½	69	69½	70
.2	65	65½	66	67	67½	68	68½	69	69½	70½
.3	65½	66	66½	67	67½	68	68½	69½	70	70½
.4	65½	66	66½	67	68	68½	69	69½	70	70½
.5	65½	66	67	67½	68	68½	69	69½	70½	71
.6	66	66½	67	67½	68	68½	69½	70	70½	71
.7	66	66½	67	67½	68½	69	69½	70	70½	71½
.8	66	67	67½	68	68½	69	69½	70½	71	71½
.9	66½	67	67½	68	68½	69½	70	70½	71	71½

Lengths.	23. MEAN DIAMETERS.									
	23.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
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Lengths.	24. MEAN DIAMETERS.									
	24.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
27.0.....	53	53½	54	54	54½	55	55½	56	56½	57
.1.....	53	53½	54	54½	55	55½	56	56	56½	57
.2.....	53½	53½	54	54½	55	55½	56	56½	57	57½
.3.....	53½	54	54½	55	55½	55½	56	56½	57	57½
.4.....	53½	54	54½	55	55½	56	56½	57	57½	58
.5.....	54	54½	55	55	55½	56	56½	57	57½	58
.6.....	54	54½	55	55½	56	56½	57	57½	57½	58
.7.....	54	54½	55	55½	56	56½	57	57½	58	58½
.8.....	54½	55	55½	56	56½	56½	57	57½	58	58½
.9.....	54½	55	55½	56	56½	57	57½	58	58½	59
28.0.....	55	55½	56	56	56½	57	57½	58	58½	59
.1.....	55	55½	56	56½	57	57½	58	58½	59	59
.2.....	55	55½	56	56½	57	57½	58	58½	59	59½
.3.....	55½	56	56½	57	57½	58	58	58½	59	59½
.4.....	55½	56	56½	57	57½	58	58½	59	59½	60
.5.....	56	56½	56½	57	57½	58	58½	59	59½	60
.6.....	56	56½	57	57½	58	58½	59	59½	60	60½
.7.....	56	56½	57	57½	58	58½	59	59½	60	60½
.8.....	56½	57	57½	58	58½	59	59½	59½	60	60½
.9.....	56½	57	57½	58	58½	59	59½	60	60½	61
29.0.....	57	57½	57½	58	58½	59	59½	60	60½	61
.1.....	57	57½	58	58½	59	59½	60	60½	61	61½
.2.....	57	57½	58	58½	59	59½	60	60½	61	61½
.3.....	57½	58	58½	59	59½	60	60½	61	61½	62
.4.....	57½	58	58½	59	59½	60	60½	61	61½	62
.5.....	58	58½	58½	59	59½	60	60½	61	61½	62
.6.....	58	58½	59	59½	60	60½	61	61½	62	62½
.7.....	58	58½	59	59½	60	60½	61	61½	62	62½
.8.....	58½	59	59½	60	60½	61	61½	62	62½	63
.9.....	58½	59	59½	60	60½	61	61½	62	62½	63

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
30.0	59	59	59½	60	60½	61	61½	62	62½	63
.1	59	59½	60	60½	61	61½	62	62½	63	63½
.2	59	59½	60	60½	61	61½	62	62½	63	63½
.3	59½	60	60½	61	61½	62	62½	63	63½	64
.4	59½	60	60½	61	61½	62	62½	63	63½	64
.5	59½	60	60½	61	61½	62	63	63½	64	64½
.6	60	60½	61	61½	62	62½	63	63½	64	64½
.7	60	60½	61	61½	62	62½	63	63½	64	64½
.8	60½	61	61½	62	62½	63	63½	64	64½	65
.9	60½	61	61½	62	62½	63	63½	64	64½	65
31.0	60½	61	61½	62	63	63½	64	64½	65	65½
.1	61	61½	62	62½	63	63½	64	64½	65	65½
.2	61	61½	62	62½	63	63½	64	64½	65	66
.3	61½	62	62½	63	63½	64	64½	65	65½	66
.4	61½	62	62½	63	63½	64	64½	65	65½	66
.5	61½	62	62½	63	64	64½	65	65½	66	66½
.6	62	62½	63	63½	64	64½	65	65½	66	66½
.7	62	62½	63	63½	64	64½	65	66	66½	67
.8	62½	63	63½	64	64½	65	65½	66	66½	67
.9	62½	63	63½	64	64½	65	65½	66	66½	67
32.0	62½	63	63½	64	65	65½	66	66½	67	67½
.1	63	63½	64	64½	65	65½	66	66½	67	67½
.2	63	63½	64	64½	65	65½	66½	67	67½	68
.3	63½	64	64½	65	65½	66	66½	67	67½	68
.4	63½	64	64½	65	65½	66	66½	67	68	68½
.5	63½	64	64½	65	66	66½	67	67½	68	68½
.6	64	64½	65	65½	66	66½	67	67½	68	68½
.7	64	64½	65	65½	66	66½	67½	68	68½	69
.8	64	65	65½	66	66½	67	67½	68	68½	69
.9	64½	65	65½	66	66½	67	67½	68	69	69½
33.0	64½	65	65½	66½	67	67½	68	68½	69	69½
.1	65	65½	66	66½	67	67½	68	68½	69	70
.2	65	65½	66	66½	67	68	68½	69	69½	70
.3	65	66	66½	67	67½	68	68½	69	69½	70
.4	65½	66	66½	67	67½	68	68½	69½	70	70½
.5	65½	66	66½	67½	68	68½	69	69½	70	70½
.6	66	66½	67	67½	68	68½	69	69½	70½	71
.7	66	66½	67	67½	68	69	69½	70	70½	71
.8	66	66½	67½	68	68½	69	69½	70	70½	71½
.9	66½	67	67½	68	68½	69	70	70½	71	71½

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
34.0	66½	67	67½	68½	69	69½	70	70½	71	71½
.1	67	67½	68	68½	69	69½	70	70½	71½	72
.2	67	67½	68	68½	69	70	70½	71	71½	72
.3	67	67½	68½	69	69½	70	70½	71	71½	72½
.4	67½	68	68½	69	69½	70	71	71½	72	72½
.5	67½	68	68½	69½	70	70½	71	71½	72	72½
.6	68	68½	69	69½	70	70½	71	72	72½	73
.7	68	68½	69	69½	70	71	71½	72	72½	73
.8	68	68½	69½	70	70½	71	71½	72	73	73½
.9	68½	69	69½	70	70½	71	72	72½	73	73½
35.0	68½	69	69½	70½	71	71½	72	72½	73	74
.1	68½	69½	70	70½	71	71½	72	73	73½	74
.2	69	69½	70	70½	71½	72	72½	73	73½	74
.3	69	69½	70½	71	71½	72	72½	73	74	74½
.4	69½	70	70½	71	71½	72	73	73½	74	74½
.5	69½	70	70½	71½	72	72½	73	73½	74	75
.6	69½	70½	71	71½	72	72½	73	74	74½	75
.7	70	70½	71	71½	72½	73	73½	74	74½	75½
.8	70	70½	71½	72	72½	73	73½	74½	75	75½
.9	70½	71	71½	72	72½	73½	74	74½	75	75½
36.0	70½	71	71½	72½	73	73½	74	74½	75½	76
.1	70½	71½	72	72½	73	73½	74½	75	75½	76
.2	71	71½	72	72½	73½	74	74½	75	75½	76½
.3	71	71½	72½	73	73½	74	74½	75½	76	76½
.4	71½	72	72½	73	73½	74½	75	75½	76	76½
.5	71½	72	72½	73½	74	74½	75	75½	76½	77
.6	71½	72½	73	73½	74	74½	75½	76	76½	77
.7	72	72½	73	73½	74½	75	75½	76	76½	77½
.8	72	72½	73½	74	74½	75	75½	76½	77	77½
.9	72½	73	73½	74	74½	75½	76	76½	77	78
37.0	72½	73	73½	74½	75	75½	76	76½	77½	78
.1	72½	73½	74	74½	75	75½	76½	77	77½	78
.2	73	73½	74	74½	75½	76	76½	77	78	78½
.3	73	73½	74½	75	75½	76	76½	77½	78	78½
.4	73	74	74½	75	75½	76½	77	77½	78	79
.5	73½	74	74½	75½	76	76½	77	78	78½	79
.6	73½	74½	75	75½	76	76½	77½	78	78½	79½
.7	74	74½	75	75½	76½	77	77½	78	79	79½
.8	74	74½	75½	76	76½	77	78	78½	79	79½
.9	74	75	75½	76	76½	77½	78	78½	79½	80

Lengths.	24. MEAN DIAMETERS.									
	24.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
28.0.....	59½	60	60½	61	61½	62	62½	63	63½	64
.1.....	59½	60	60½	61	61½	62	62½	63	63½	64
.2.....	60	60½	61	61½	62	62½	63	63½	64	64½
.3.....	60	60½	61	61½	62	62½	63	63½	64	64½
.4.....	60½	61	61½	62	62½	63	63½	64	64½	65
.5.....	60½	61	61½	62	62½	63	63½	64	64½	65
.6.....	61	61½	62	62	62½	63	63½	64	64½	65
.7.....	61	61½	62	62½	63	63½	64	64½	65	65½
.8.....	61	61½	62	62½	63	63½	64	64½	65	65½
.9.....	61½	62	62½	63	63½	64	64½	65	65½	66
29.0.....	61½	62	62½	63	63½	64	64½	65	65½	66
.1.....	62	62½	63	63½	64	64½	65	65½	66	66½
.2.....	62	62½	63	63½	64	64½	65	65½	66	66½
.3.....	62½	63	63½	64	64½	65	65½	66	66½	67
.4.....	62½	63	63½	64	64½	65	65½	66	66½	67
.5.....	62½	63	63½	64	64½	65	65½	66	67	67½
.6.....	63	63½	64	64½	65	65½	66	66½	67	67½
.7.....	63	63½	64	64½	65	65½	66	66½	67	67½
.8.....	63½	64	64½	65	65½	66	66½	67	67½	68
.9.....	63½	64	64½	65	65½	66	66½	67	67½	68
30.0.....	64	64½	65	65½	66	66½	67	67½	68	68½
.1.....	64	64½	65	65½	66	66½	67	67½	68	68½
.2.....	64	64½	65	65½	66	67	67½	68	68½	69
.3.....	64½	65	65½	66	66½	67	67½	68	68½	69
.4.....	64½	65	65½	66	66½	67	67½	68½	69	69½
.5.....	65	65½	66	66½	67	67½	68	68½	69	69½
.6.....	65	65½	66	66½	67	67½	68	68½	69½	70
.7.....	65	66	66½	67	67½	68	68½	69	69½	70
.8.....	65½	66	66½	67	67½	68	68½	69	69½	70
.9.....	65½	66	66½	67	68	68½	69	69½	70	70½

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0	66	66½	67	67½	68	68½	69	69½	70	70½
.1	66	66½	67	67½	68	69	69½	70	70½	71
.2	66½	67	67½	68	68½	69	69½	70	70½	71
.3	66½	67	67½	68	68½	69	69½	70½	71	71½
.4	66½	67½	68	68½	69	69½	70	70½	71	71½
.5	67	67½	68	68½	69	69½	70	70½	71½	72
.6	67	67½	68	69	69½	70	70½	71	71½	72
.7	67½	68	68½	69	69½	70	70½	71	71½	72½
.8	67½	68	68½	69	70	70½	71	71½	72	72½
.9	68	68½	69	69½	70	70½	71	71½	72	73
32.0	68	68½	69	69½	70	70½	71½	72	72½	73
.1	68	69	69½	70	70½	71	71½	72	72½	73
.2	68½	69	69½	70	70½	71	71½	72½	73	73½
.3	68½	69	69½	70½	71	71½	72	72½	73	73½
.4	69	69½	70	70½	71	71½	72	73	73½	74
.5	69	69½	70	70½	71½	72	72½	73	73½	74
.6	69½	70	70½	71	71½	72	72½	73	74	74½
.7	69½	70	70½	71	71½	72½	73	73½	74	74½
.8	69½	70½	71	71½	72	72½	73	73½	74	75
.9	70	70½	71	71½	72	72½	73½	74	74½	75
33.0	70	70½	71½	72	72½	73	73½	74	74½	75½
.1	70½	71	71½	72	72½	73	74	74½	75	75½
.2	70½	71	71½	72½	73	73½	74	74½	75	75½
.3	71	71½	72	72½	73	73½	74	75	75½	76
.4	71	71½	72	72½	73½	74	74½	75	75½	76
.5	71	72	72½	73	73½	74	74½	75	76	76½
.6	71½	72	72½	73	73½	74½	75	75½	76	76½
.7	71½	72	73	73½	74	74½	75	75½	76½	77
.8	72	72½	73	73½	74	74½	75½	76	76½	77
.9	72	72½	73	74	74½	75	75½	76	76½	77½
34.0	72½	73	73½	74	74½	75	76	76½	77	77½
.1	72½	73	73½	74	75	75½	76	76½	77	78
.2	72½	73½	74	74½	75	75½	76	77	77½	78
.3	73	73½	74	74½	75	76	76½	77	77½	78
.4	73	73½	74½	75	75½	76	76½	77½	78	78½
.5	73½	74	74½	75	75½	76½	77	77½	78	78½
.6	73½	74	74½	75½	76	76½	77	77½	78½	79
.7	73½	74½	75	75½	76	76½	77½	78	78½	79
.8	74	74½	75	75½	76½	77	77½	78	79	79½
.9	74	75	75½	76	76½	77	78	78½	79	79½

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
35.0	74½	75	75½	76	77	77½	78	78½	79	80
.1	74½	75	76	76½	77	77½	78	79	79½	80
.2	75	75½	76	76½	77	78	78½	79	79½	80½
.3	75	75½	76	77	77½	78	78½	79½	80	80½
.4	75	76	76½	77	77½	78½	79	79½	80	80½
.5	75½	76	76½	77½	78	78½	79	79½	80½	81
.6	75½	76½	77	77½	78	78½	79½	80	80½	81
.7	76	76½	77	77½	78½	79	79½	80	81	81½
.8	76	76½	77½	78	78½	79	80	80½	81	81½
.9	76½	77	77½	78	78½	79½	80	80½	81	82
36.0	76½	77	77½	78½	79	79½	80	81	81½	82
.1	76½	77½	78	78½	79	80	80½	81	81½	82½
.2	77	77½	78	79	79½	80	80½	81½	82	82½
.3	77	78	78½	79	79½	80½	81	81½	82	83
.4	77½	78	78½	79	80	80½	81	81½	82½	83
.5	77½	78	79	79½	80	80½	81½	82	82½	83
.6	78	78½	79	79½	80½	81	81½	82	83	83½
.7	78	78½	79	80	80½	81	82	82½	83	83½
.8	78	79	79½	80	80½	81½	82	82½	83½	84
.9	78½	79	79½	80½	81	81½	82	83	83½	84
37.0	78½	79½	80	80½	81	82	82½	83	83½	84½
.1	79	79½	80	80½	81½	82	82½	83½	84	84½
.2	79	79½	80½	81	81½	82	83	83½	84	85
.3	79½	80	80½	81	82	82½	83	84	84½	85
.4	79½	80	81	81½	82	82½	83½	84	84½	85½
.5	79½	80½	81	81½	82½	83	83½	84	85	85½
.6	80	80½	81	82	82½	83	84	84½	85	86
.7	80	81	81½	82	82½	83½	84	84½	85½	86
.8	80½	81	81½	82½	83	83½	84	85	85½	86
.9	80½	81	82	82½	83	84	84½	85	86	86½
38.0	80½	81½	82	82½	83½	84	84½	85½	86	86½
.1	81	81½	82½	83	83½	84	85	85½	86	87
.2	81	82	82½	83	84	84½	85	86	86½	87
.3	81½	82	82½	83½	84	84½	85½	86	86½	87½
.4	81½	82½	83	83½	84	85	85½	86	87	87½
.5	82	82½	83	84	84½	85	86	86½	87	88
.6	82	82½	83½	84	84½	85½	86	86½	87½	88
.7	82	83	83½	84	85	85½	86	87	87½	88½
.8	82½	83	84	84½	85	86	86½	87	88	88½
.9	82½	83½	84	84½	85½	86	86½	87½	88	88½

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
39.0	83	83½	84	85	85½	86	87	87½	88½	89
.1	83	84	84½	85	86	86½	87	88	88½	89
.2	83½	84	84½	85½	86	86½	87½	88	88½	89½
.3	83½	84	85	85½	86	87	87½	88½	89	89½
.4	83½	84½	85	85½	86½	87	88	88½	89	90
.5	84	84½	85½	86	86½	87½	88	88½	89½	90
.6	84	85	85½	86	87	87½	88	89	89½	90½
.7	84½	85	85½	86½	87	88	88½	89	90	90½
.8	84½	85½	86	86½	87½	88	88½	89½	90	91
.9	85	85½	86	87	87½	88	89	89½	90½	91
40.0	85	85½	86½	87	87½	88½	89	90	90½	91
.1	85	86	86½	87½	88	88½	89½	90	91	91½
.2	85½	86	87	87½	88	89	89½	90½	91	91½
.3	85½	86½	87	87½	88½	89	90	90½	91	92
.4	86	86½	87	88	88½	89½	90	90½	91½	92
.5	86	87	87½	88	89	89½	90	91	91½	92½
.6	86½	87	87½	88½	89	90	90½	91	92	92½
.7	86½	87	88	88½	89½	90	90½	91½	92	93
.8	86½	87½	88	89	89½	90	91	91½	92½	93
.9	87	87½	88½	89	89½	90½	91	92	92½	93½
41.0	87	88	88½	89	90	90½	91½	92	93	93½
.1	87½	88	88½	89½	90	91	91½	92½	93	93½
.2	87½	88½	89	89½	90½	91	92	92½	93	94
.3	88	88½	89	90	90½	91½	92	92½	93½	94
.4	88	88½	89½	90	91	91½	92	93	93½	94½
.5	88	89	89½	90½	91	92	92½	93	94	94½
.6	88½	89	90	90½	91½	92	92½	93½	94	95
.7	88½	89½	90	91	91½	92	93	93½	94½	95
.8	89	89½	90½	91	91½	92½	93	94	94½	95½
.9	89	90	90½	91	92	92½	93½	94	95	95½
42.0	89½	90	90½	91½	92	93	93½	94½	95	96
.1	89½	90	91	91½	92½	93	94	94½	95½	96
.2	89½	90½	91	92	92½	93½	94	95	95½	96
.3	90	90½	91½	92	93	93½	94½	95	95½	96½
.4	90	91	91½	92½	93	93½	94½	95	96	96½
.5	90½	91	92	92½	93	94	94½	95½	96	97
.6	90½	91½	92	92½	93½	94	95	95½	96½	97
.7	90½	91½	92	93	93½	94½	95	96	96½	97½
.8	91	91½	92½	93	94	94½	95½	96	97	97½
.9	91	92	92½	93½	94	95	95½	96½	97	98

Lengths.	25. MEAN DIAMETERS.									
	25.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
43.0	91½	92	93	93½	94½	95	96	96½	97½	98
.1	91½	92½	93	94	94½	95½	96	97	97½	98½
.2	92	92½	93½	94	95	95½	96½	97	98	98½
.3	92	93	93½	94	95	95½	96½	97	98	99
.4	92	93	93½	94½	95	96	96½	97½	98	99
.5	92½	93	94	94½	95½	96	97	97½	98½	99
.6	92½	93½	94	95	95½	96½	97	98	98½	99½
.7	93	93½	94½	95	96	96½	97½	98	99	99½
.8	93	94	94½	95½	96	97	97½	98½	99	100
.9	93½	94	95	95½	96½	97	98	98½	99½	100
44.0	93½	94	95	96	96½	97½	98	99	99½	100½
.1	93½	94½	95	96	96½	97½	98½	99	100	100½
.2	94	94½	95½	96	97	97½	98½	99½	100	101
.3	94	95	95½	96½	97	98	98½	99½	100½	101
.4	94½	95	96	96½	97½	98	99	99½	100½	101½
.5	94½	95½	96	97	97½	98½	99	100	100½	101½
.6	95	95½	96½	97	98	98½	99½	100	101	101½
.7	95	95½	96½	97½	98	99	99½	100½	101	102
.8	95	96	96½	97½	98½	99	100	100½	101½	102
.9	95½	96	97	97½	98½	99½	100	101	101½	102½
45.0	95½	96½	97	98	98½	99½	100½	101	102	102½
.1	96	96½	97½	98	99	99½	100½	101½	102	103
.2	96	97	97½	98½	99	100	100½	101½	102½	103
.3	96½	97	98	98½	99½	100	101	101½	102½	103½
.4	96½	97	98	99	99½	100½	101	102	102½	103½
.5	96½	97½	98	99	100	100½	101½	102	103	104
.6	97	97½	98½	99	100	101	101½	102½	103	104
.7	97	98	98½	99½	100	101	102	102½	103½	104
.8	97½	98	99	99½	100½	101½	102	103	103½	104½
.9	97½	98½	99	100	100½	101½	102½	103	104	104½
46.0	97½	98½	99½	100	101	101½	102½	103½	104	105
.1	98	98½	99½	100½	101	102	102½	103½	104½	105
.2	98	99	100	100½	101½	102	103	103½	104½	105½
.3	98½	99	100	101	101½	102½	103	104	105	105½
.4	98½	99½	100	101	102	102½	103½	104	105	106
.5	99	99½	100½	101	102	103	103½	104½	105	106
.6	99	100	100½	101½	102	103	104	104½	105½	106½
.7	99	100	101	101½	102½	103	104	105	105½	106½
.8	99½	100	101	102	102½	103½	104½	105	106	106½
.9	99½	100½	101½	102	103	103½	104½	105½	106	107

Lengths.	25. MEAN DIAMETERS.									
	25.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
47.0	100	100½	101½	102½	103	104	104½	105½	106½	107
.1	100	101	101½	102½	103½	104	105	106	106½	107½
.2	100½	101	102	102½	103½	104½	105	106	107	107½
.3	100½	101½	102	103	104	104½	105½	106	107	108
.4	100½	101½	102½	103	104	105	105½	106½	107½	108
.5	101	101½	102½	103½	104	105	106	106½	107½	108½
.6	101	102	103	103½	104½	105	106	107	107½	108½
.7	101½	102	103	104	104½	105½	106½	107	108	109
.8	101½	102½	103	104	105	105½	106½	107½	108	109
.9	102	102½	103½	104	105	106	106½	107½	108½	109
48.0	102	103	103½	104½	105½	106	107	108	108½	109½
.1	102	103	104	104½	105½	106½	107	108	109	109½
.2	102½	103	104	105	105½	106½	107½	108	109	110
.3	102½	103½	104½	105	106	107	107½	108½	109½	110
.4	103	103½	104½	105½	106	107	108	108½	109½	110½
.5	103	104	104½	105½	106½	107	108	109	110	110½
.6	103½	104	105	106	106½	107½	108½	109	110	111
.7	103½	104½	105	106	107	107½	108½	109½	110	111
.8	103½	104½	105½	106	107	108	108½	109½	110½	111½
.9	104	104½	105½	106½	107½	108	109	110	110½	111½
49.0	104	105	106	106½	107½	108½	109	110	111	112
.1	104½	105	106	107	107½	108½	109½	110½	111	112
.2	104½	105½	106	107	108	109	109½	110½	111½	112
.3	105	105½	106½	107½	108	109	110	110½	111½	112½
.4	105	106	106½	107½	108½	109	110	111	112	112½
.5	105	106	107	107½	108½	109½	110½	111	112	113
.6	105½	106	107	108	109	109½	110½	111½	112½	113
.7	105½	106½	107½	108	109	110	110½	111½	112½	113½
.8	106	106½	107½	108½	109	110	111	112	112½	113½
.9	106	107	107½	108½	109½	110½	111	112	113	114

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
29.0	66½	67	67½	68	68½	69	70	70½	71	71½
.1	67	67½	68	68½	69	69½	70	70½	71	71½
.2	67	67½	68	68½	69	69½	70	71	71½	72
.3	67½	68	68½	69	69½	70	70½	71	71½	72
.4	67½	68	68½	69	69½	70	70½	71½	72	72½
.5	68	68½	69	69½	70	70½	71	71½	72	72½
.6	68	68½	69	69½	70	70½	71	71½	72½	73
.7	68½	69	69½	70	70½	71	71½	72	72½	73
.8	68½	69	69½	70	70½	71	71½	72	73	73½
.9	68½	69½	70	70½	71	71½	72	72½	73	73½
30.0	69	69½	70	70½	71	71½	72	72½	73½	74
.1	69	69½	70½	71	71½	72	72½	73	73½	74
.2	69½	70	70½	71	71½	72	72½	73	73½	74½
.3	69½	70	70½	71½	72	72½	73	73½	74	74½
.4	70	70½	71	71½	72	72½	73	73½	74	75
.5	70	70½	71	71½	72½	73	73½	74	74½	75
.6	70½	71	71½	72	72½	73	73½	74	74½	75½
.7	70½	71	71½	72	72½	73½	74	74½	75	75½
.8	71	71½	72	72½	73	73½	74	74½	75	76
.9	71	71½	72	72½	73	74	74½	75	75½	76
31.0	71½	72	72½	73	73½	74	74½	75	75½	76½
.1	71½	72	72½	73	73½	74½	75	75½	76	76½
.2	71½	72½	73	73½	74	74½	75	75½	76	77
.3	72	72½	73	73½	74	74½	75½	76	76½	77
.4	72	72½	73½	74	74½	75	75½	76	76½	77½
.5	72½	73	73½	74	74½	75	76	76½	77	77½
.6	72½	73	74	74½	75	75½	76	76½	77	77½
.7	73	73½	74	74½	75	75½	76½	77	77½	78
.8	73	73½	74	75	75½	76	76½	77	77½	78
.9	73½	74	74½	75	75½	76	76½	77½	78	78½
32.0	73½	74	74½	75½	76	76½	77	77½	78	78½
.1	74	74½	75	75½	76	76½	77	78	78½	79
.2	74	74½	75	75½	76½	77	77½	78	78½	79
.3	74	75	75½	76	76½	77	77½	78½	79	79½
.4	74½	75	75½	76	77	77½	78	78½	79	79½
.5	74½	75½	76	76½	77	77½	78	79	79½	80
.6	75	75½	76	76½	77½	78	78½	79	79½	80
.7	75	75½	76½	77	77½	78	78½	79½	80	80½
.8	75½	76	76½	77	77½	78½	79	79½	80	80½
.9	75½	76	77	77½	78	78½	79	79½	80½	81

Lengths.	26. MEAN DIAMETERS.									
	26.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
33.0	76	76½	77	77½	78	79	79½	80	80½	81
.1	76	76½	77½	78	78½	79	79½	80	81	81½
.2	76½	77	77½	78	78½	79½	80	80½	81	81½
.3	76½	77	77½	78½	79	79½	80	80½	81½	82
.4	77	77½	78	78½	79	79½	80½	81	81½	82
.5	77	77½	78	79	79½	80	80½	81	82	82½
.6	77	78	78½	79	79½	80	81	81½	82	82½
.7	77½	78	78½	79½	80	80½	81	81½	82½	83
.8	77½	78½	79	79½	80	80½	81½	82	82½	83
.9	78	78½	79	79½	80½	81	81½	82	83	83½
34.0	78	78½	79½	80	80½	81	82	82½	83	83½
.1	78½	79	79½	80	81	81½	82	82½	83½	84
.2	78½	79	80	80½	81	81½	82½	83	83½	84
.3	79	79½	80	80½	81½	82	82½	83	84	84½
.4	79	79½	80½	81	81½	82	83	83½	84	84½
.5	79½	80	80½	81	82	82½	83	83½	84	85
.6	79½	80	81	81½	82	82½	83	84	84½	85
.7	80	80½	81	81½	82	83	83½	84	84½	85½
.8	80	80½	81	82	82½	83	83½	84½	85	85½
.9	80	81	81½	82	82½	83½	84	84½	85	86
35.0	80½	81	81½	82½	83	83½	84	85	85½	86
.1	80½	81½	82	82½	83	84	84½	85	85½	86½
.2	81	81½	82	83	83½	84	84½	85½	86	86½
.3	81	82	82½	83	83½	84½	85	85½	86	87
.4	81½	82	82½	83½	84	84½	85	86	86½	87
.5	81½	82	83	83½	84	85	85½	86	86½	87½
.6	82	82½	83	83½	84½	85	85½	86½	87	87½
.7	82	82½	83½	84	84½	85	86	86½	87	88
.8	82½	83	83½	84	85	85½	86	87	87½	88
.9	82½	83	84	84½	85	85½	86½	87	87½	88½
36.0	82½	83½	84	84½	85½	86	86½	87½	88	88½
.1	83	83½	84½	85	85½	86	87	87½	88	89
.2	83	84	84½	85	86	86½	87	87½	88½	89
.3	83½	84	84½	85½	86	86½	87½	88	88½	89½
.4	83½	84½	85	85½	86½	87	87½	88	89	89½
.5	84	84½	85	86	86½	87	88	88½	89	90
.6	84	85	85½	86	86½	87½	88	88½	89½	90
.7	84½	85	85½	86½	87	87½	88½	89	89½	90½
.8	84½	85	86	86½	87	88	88½	89	90	90½
.9	85	85½	86	87	87½	88	89	89½	90	91

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	85	85½	86½	87	87½	88½	89	89½	90½	91
.1	85½	86	86½	87	88	88½	89½	90	90½	91½
.2	85½	86	87	87½	88	89	89½	90	91	91½
.3	85½	86½	87	87½	88½	89	89½	90½	91	92
.4	86	86½	87½	88	88½	89½	90	90½	91½	92
.5	86	87	87½	88	89	89½	90	91	91½	92½
.6	86½	87	88	88½	89	90	90½	91	92	92½
.7	86½	87½	88	88½	89½	90	90½	91½	92	93
.8	87	87½	88	89	89½	90½	91	91½	92½	93
.9	87	88	88½	89	90	90½	91	92	92½	93
38.0	87½	88	88½	89½	90	90½	91½	92	93	93½
.1	87½	88	89	89½	90½	91	91½	92½	93	93½
.2	88	88½	89	90	90½	91	92	92½	93½	94
.3	88	88½	89½	90	91	91½	92	93	93½	94
.4	88½	89	89½	90½	91	91½	92½	93	94	94½
.5	88½	89	90	90½	91	92	92½	93½	94	94½
.6	88½	89½	90	91	91½	92	93	93½	94½	95
.7	89	89½	90½	91	91½	92½	93	94	94½	95
.8	89	90	90½	91	92	92½	93½	94	95	95½
.9	89½	90	91	91½	92	93	93½	94½	95	95½
39.0	89½	90½	91	91½	92½	93	94	94½	95	96
.1	90	90½	91½	92	92½	93½	94	95	95½	96
.2	90	91	91½	92	93	93½	94½	95	95½	96½
.3	90½	91	91½	92½	93	94	94½	95½	96	96½
.4	90½	91½	92	92½	93½	94	95	95½	96	97
.5	91	91½	92	93	93½	94½	95	95½	96½	97
.6	91	91½	92½	93	94	94½	95½	96	96½	97½
.7	91	92	92½	93½	94	95	95½	96	97	97½
.8	91½	92	93	93½	94½	95	95½	96½	97	98
.9	91½	92½	93	94	94½	95½	96	96½	97½	98
40.0	92	92½	93½	94	95	95½	96	97	97½	98½
.1	92	93	93½	94½	95	95½	96½	97	98	98½
.2	92½	93	94	94½	95½	96	96½	97½	98	99
.3	92½	93½	94	95	95½	96	97	97½	98½	99
.4	93	93½	94½	95	95½	96½	97	98	98½	99½
.5	93	94	94½	95	96	96½	97½	98	99	99½
.6	93½	94	95	95½	96	97	97½	98½	99	100
.7	93½	94½	95	95½	96½	97	98	98½	99½	100
.8	94	94½	95	96	96½	97½	98	99	99½	100½
.9	94	94½	95½	96	97	97½	98½	99	100	100½

Lengths.	26. MEAN DIAMETERS.									
	26.0	**.1**	**.2**	**3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
41.0	94	95	95½	96½	97	98	98½	99½	100	101
.1	94½	95	96	96½	97½	98	99	99½	100½	101
.2	94½	95½	96	97	97½	98½	99	100	100½	101½
.3	95	95½	96½	97	98	98½	99½	100	101	101½
.4	95	96	96½	97½	98	99	99½	100½	101	102
.5	95½	96	97	97½	98½	99	100	100½	101½	102
.6	95½	96½	97	98	98½	99½	100	101	101½	102½
.7	96	96½	97½	98	99	99½	100½	101	102	102½
.8	96	97	97½	98½	99	100	100½	101½	102	103
.9	96½	97	98	98½	99½	100	101	101½	102½	103
42.0	96½	97½	98	99	99½	100½	101	102	102½	103½
.1	97	97½	98½	99	100	100½	101½	102	103	103½
.2	97	97½	98½	99	100	101	101½	102½	103	104
.3	97	98	98¼	99½	100	101	102	102½	103½	104
.4	97½	98	99	99¼	100½	101	102	103	103½	104½
.5	97½	98½	99	100	100½	101½	102	103	104	104½
.6	98	98½	99½	100	101	101½	102½	103½	104	105
.7	98	99	99½	100½	101	102	102½	103½	104½	105
.8	98½	99	100	100½	101½	102	103	103½	104½	105½
.9	98½	99½	100	101	101½	102½	103	104	105	105½
43.0	99	99½	100½	101	102	102½	103½	104	105	106
.1	99	100	100½	101½	102	103	103½	104½	105½	106
.2	99½	100	101	101½	102½	103	104	104½	105½	106½
.3	99½	100½	101	102	102½	103½	104	105	105½	106½
.4	100	100½	101½	102	103	103½	104½	105	106	107
.5	100	101	101½	102½	103	104	104½	105½	106	107
.6	100	101	102	102½	103½	104	105	105½	106½	107½
.7	100½	101	102	103	103½	104½	105	106	106½	107½
.8	100½	101½	102	103	104	104½	105½	106	107	108
.9	101	101½	102½	103	104	105	105½	106½	107	108
44.0	101	102	102½	103½	104½	105	106	106½	107½	108½
.1	101½	102	103	103½	104½	105½	106	107	107½	108½
.2	101½	102½	103	104	104½	105½	106½	107	108	108½
.3	102	102½	103½	104	105	106	106½	107½	108	109
.4	102	103	103½	104½	105	106	107	107½	108½	109
.5	102½	103	104	104½	105½	106½	107	108	108½	109½
.6	102½	103½	104	105	105½	106½	107½	108	109	109½
.7	102½	103½	104½	105	106	106½	107½	108½	109	110
.8	103	104	104½	105½	106	107	108	108½	109½	110
.9	103	104	105	105½	106½	107	108	109	109½	110½

Lengths.	26. MEAN DIAMETERS.									
	26.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
45.0	103½	104	105	106	106½	107½	108½	109	110	110½
.1	103½	104½	105½	106	107	107½	108½	109½	110	111
.2	104	104½	105½	106½	107	108	108½	109½	110½	111
.3	104	105	105½	106½	107½	108	109	110	110½	111½
.4	104½	105	106	107	107½	108½	109	110	111	111½
.5	104½	105½	106	107	108	108½	109½	110½	111	112
.6	105	105½	106½	107	108	109	109½	110½	111½	112
.7	105	106	106½	107½	108½	109	110	111	111½	112½
.8	105½	106	107	107½	108½	109½	110	111	112	112½
.9	105½	106½	107	108	109	109½	110½	111½	112	113
46.0	105½	106½	107½	108	109	110	110½	111½	112½	113
.1	106	107	107½	108½	109	110	111	111½	112½	113½
.2	106	107	108	108½	109½	110½	111	112	113	113½
.3	103½	107	108	109	109½	110½	111½	112	113	114
.4	106½	107½	108½	109	110	111	111½	112½	113½	114
.5	107	107½	108½	109½	110	111	112	112½	113½	114½
.6	107	108	109	109½	110½	111½	112	113	114	114½
.7	107½	108	109	110	110½	111½	112½	113	114	115
.8	107½	108½	109	110	111	111½	112½	113½	114½	115
.9	108	108½	109½	110½	111	112	113	113½	114½	115½
47.0	108	109	109½	110½	111½	112	113	114	115	115½
.1	108½	109	110	111	111½	112½	113½	114	115	116
.2	108½	109½	110	111	112	112½	113½	114½	115½	116
.3	108½	109½	110½	111	112	113	114	114½	115½	116½
.4	109	110	110½	111½	112½	113	114	115	116	116½
.5	109	110	111	111½	112½	113½	114½	115	116	117
.6	109½	110	111	112	113	113½	114½	115½	116	117
.7	109½	110½	111½	112	113	114	115	115½	116½	117½
.8	110	110½	111½	112½	113½	114	115	116	116½	117½
.9	110	111	112	112½	113½	114½	115	116	117	118
48.0	110½	111	112	113	113½	114½	115½	116½	117	118
.1	110½	111½	112½	113	114	115	115½	116½	117½	118½
.2	111	111½	112½	113½	114	115	116	117	117½	118½
.3	111	112	112½	113½	114½	115½	116	117	118	119
.4	111	112	113	114	114½	115½	116½	117½	118	119
.5	111½	112½	113	114	115	116	116½	117½	118½	119½
.6	111½	112½	113½	114½	115	116	117	118	118½	119½
.7	112	113	113½	114½	115½	116½	117	118	119	120
.8	112	113	114	115	115½	116½	117½	118½	119	120
.9	112½	113½	114	115	116	117	117½	118½	119½	120½

Lengths.	26. MEAN DIAMETERS.									
	26.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
49.0	112½	113½	114½	115	116	117	118	119	119½	120½
.1	113	113½	114½	115½	116½	117	118	119	120	121
.2	113	114	115	115½	116½	117½	118½	119½	120	121
.3	113½	114	115	116	117	117½	118½	119½	120½	121½
.4	113½	114½	115½	116	117	118	119	119½	120½	121½
.5	114	114½	115½	116½	117½	118	119	120	121	122
.6	114	115	116	116½	117½	118½	119½	120	121	122
.7	114	115	116	117	118	118½	119½	120½	121½	122½
.8	114½	115½	116	117	118	119	120	120½	121½	122½
.9	114½	115½	116½	117½	118	119	120	121	122	123
50.0	115	116	116½	117½	118½	119½	120½	121	122	123

Lengths.	27. MEAN DIAMETERS.									
	27.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
30.0	74½	75	75½	76	76½	77	77½	78½	79	79½
.1	74½	75	75½	76½	77	77½	78	78½	79	79½
.2	75	75½	76	76½	77	77½	78	79	79½	80
.3	75	75½	76	77	77½	78	78½	79	79½	80
.4	75½	76	76½	77	77½	78	78½	79½	80	80½
.5	75½	76	76½	77½	78	78½	79	79½	80	80½
.6	76	76½	77	77½	78	78½	79½	80	80½	81
.7	76	76½	77	78	78½	79	79½	80	80½	81½
.8	76½	77	77½	78	78½	79	80	80½	81	81½
.9	76½	77	77½	78½	79	79½	80	80½	81	82
31.0	77	77½	78	78½	79	79½	80½	81	81½	82
.1	77	77½	78	79	79½	80	80½	81	81½	82½
.2	77½	78	78½	79	79½	80	81	81½	82	82½
.3	77½	78	78½	79½	80	80½	81	81½	82	83
.4	78	78½	79	79½	80	80½	81½	82	82½	83
.5	78	78½	79	80	80½	81	81½	82	83	83½
.6	78½	79	79½	80	80½	81½	82	82½	83	83½
.7	78½	79	79½	80½	81	81½	82	82½	83½	84
.8	79	79½	80	80½	81	82	82½	83	83½	84
.9	79	79½	80	81	81½	82	82½	83	84	84½

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
32.0	79½	80	80½	81	81½	82½	83	83½	84	84½
.1	79½	80	80½	81½	82	82½	83	83½	84½	85
.2	80	80½	81	81½	82	83	83½	84	84½	85
.3	80	80½	81	82	82½	83	83½	84½	85	85½
.4	80½	81	81½	82	82½	83½	84	84½	85	85½
.5	80½	81	82	82½	83	83½	84	85	85½	86
.6	81	81½	82	82½	83	84	84½	85	85½	86½
.7	81	81½	82½	83	83½	84	84½	85½	86	86½
.8	81½	82	82½	83	83½	84½	85	85½	86	87
.9	81½	82	83	83½	84	84½	85	86	86½	87
33.0	82	82½	83	83½	84	85	85½	86	86½	87½
.1	82	82½	83½	84	84½	85	85½	86½	87	87½
.2	82½	83	83½	84	84½	85½	86	86½	87	88
.3	82½	83	84	84½	85	85½	86	87	87½	88
.4	83	83½	84	84½	85½	86	86½	87	88	88½
.5	83	83½	84½	85	85½	86	87	87½	88	88½
.6	83½	84	84½	85	86	86½	87	87½	88½	89
.7	83½	84	85	85½	86	86½	87½	88	88½	89
.8	84	84½	85	85½	86½	87	87½	88	89	89½
.9	84	84½	85½	86	86½	87	88	88½	89	89½
34.0	84½	85	85½	86	87	87½	88	88½	89½	90
.1	84½	85	86	86½	87	87½	88½	89	89½	90
.2	85	85½	86	86½	87½	88	88½	89	90	90½
.3	85	85½	86½	87	87½	88	89	89½	90	91
.4	85½	86	86½	87	88	88½	89	89½	90½	91
.5	85½	86	87	87½	88	88½	89½	90	90½	91½
.6	86	86½	87	87½	88½	89	89½	90½	91	91½
.7	86	86½	87½	88	88½	89	90	90½	91	92
.8	86½	87	87½	88	89	89½	90	91	91½	92
.9	86½	87	88	88½	89	89½	90½	91	91½	92½
35.0	87	87½	88	88½	89½	90	90½	91½	92	92½
.1	87	87½	88½	89	89½	90½	91	91½	92	93
.2	87	88	88½	89	90	90½	91	92	92½	93
.3	87½	88	89	89½	90	91	91½	92	93	93½
.4	87½	88½	89	89½	90½	91	91½	92½	93	93½
.5	88	88½	89½	90	90½	91½	92	92½	93½	94
.6	88	89	89½	90	91	91½	92	93	93½	94
.7	88½	89	90	90½	91	92	92½	93	94	94½
.8	88½	89½	90	90½	91½	92	92½	93½	94	94½
.9	89	89½	90½	91	91½	92½	93	93½	94½	95

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
36.0	89	90	90½	91	92	92½	93	94	94½	95½
.1	89½	90	91	91½	92	93	93½	94	95	95½
.2	89½	90½	91	91½	92½	93	94	94½	95	96
.3	90	90½	91½	92	92½	93½	94	94½	95½	96
.4	90	91	91½	92	93	93½	94½	95	95½	96½
.5	90½	91	92	92½	93	94	94½	95	96	96½
.6	90½	91½	92	92½	93½	94	95	95½	96	97
.7	91	91½	92½	93	93½	94½	95	95½	96½	97
.8	91	92	92½	93½	94	94½	95½	96	96½	97½
.9	91½	92	93	93½	94	95	95½	96½	97	97½
37.0	91½	92½	93	94	94½	95	96	96½	97	98
.1	92	92½	93½	94	94½	95½	96	97	97½	98
.2	92	93	93½	94½	95	95½	96½	97	97½	98½
.3	92½	93	94	94½	95	96	96½	97½	98	98½
.4	92½	93½	94	95	95½	96	97	97½	98½	99
.5	93	93½	94½	95	95½	96½	97	98	98½	99
.6	93	94	94½	95½	96	96½	97½	98	99	99½
.7	93½	94	95	95½	96	97	97½	98½	99	100
.8	93½	94½	95	96	96½	97	98	98½	99½	100
.9	94	94½	95½	96	96½	97½	98	99	99½	100½
38.0	94	95	95½	96½	97	97½	98½	99	100	100½
.1	94½	95	96	96½	97½	98	98½	99½	100	101
.2	94½	95½	96	97	97½	98	99	99½	100½	101
.3	95	95½	96½	97	98	98½	99	100	100½	101½
.4	95	96	96½	97½	98	98½	99½	100	101	101½
.5	95½	96	97	97½	98½	99	99½	100½	101	102
.6	95½	96½	97	98	98½	99½	100	100½	101½	102
.7	96	96½	97½	98	99	99½	100	101	101½	102½
.8	96	97	97½	98½	99	100	100½	101	102	102½
.9	96½	97	98	98½	99½	100	101	101½	102	103
39.0	96½	97½	98	99	99½	100½	101	101½	102½	103
.1	97	97½	98½	99	100	100½	101½	102	102½	103½
.2	97	98	98½	99½	100	101	101½	102½	103	103½
.3	97½	98	99	99½	100½	101	102	102½	103½	104
.4	97½	98½	99	100	100½	101½	102	103	103½	104½
.5	98	98½	99½	100	101	101½	102½	103	104	104½
.6	98	99	99½	100½	101	102	102½	103½	104	105
.7	98½	99	100	101½	101½	102	103	103½	104½	105
.8	98½	99½	100	101	101½	102½	103	104	104½	105½
.9	99	99½	100½	101	102	102½	103½	104	105	105½

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
40.0.....	99	100	100½	101½	102	103	103½	104½	105	106
.1.....	99½	100	101	101½	102½	103	104	104½	105½	106
.2.....	99½	100½	101	102	102½	103½	104	105	105½	106½
.3.....	100	100½	101½	102	103	103½	104½	105	106	106½
.4.....	100	101	101½	102½	103	104	104½	105½	106	107
.5.....	100½	101	102	102½	103½	104	105	105½	106½	107
.6.....	100½	101½	102	103	103½	104½	105	106	106½	107½
.7.....	101	101½	102½	103	104	104½	105½	106	107	107½
.8.....	101	102	102½	103½	104	105	105½	106½	107	108
.9.....	101½	102	103	103½	104½	105	106	106½	107½	108
41.0.....	101½	102½	103	104	104½	105½	106	107	107½	108½
.1.....	102	102½	103½	104	105	105½	106½	107	108	109
.2.....	102	103	103½	104½	105	106	106½	107½	108½	109
.3.....	102½	103	104	104½	105½	106	107	107½	108½	109½
.4.....	102½	103½	104	105	105½	106½	107	108	109	109½
.5.....	103	103½	104½	105	106	106½	107½	108½	109	110
.6.....	103	104	104½	105½	106	107	107½	108½	109½	110
.7.....	103½	104	105	105½	106½	107	108	109	109½	110½
.8.....	103½	104½	105	106	106½	107½	108½	109	110	110½
.9.....	104	104½	105½	106	107	107½	108½	109½	110	111
42.0.....	104	105	105½	106½	107	108	109	109½	110½	111
.1.....	104½	105	106	106½	107½	108	109	110	110½	111½
.2.....	104½	105½	106	107	107½	108½	109½	110	111	111½
.3.....	105	105½	106½	107	108	109	109½	110½	111	112
.4.....	105	106	106½	107½	108	109	110	110½	111½	112
.5.....	105½	106	107	107½	108½	109½	110	111	111½	112½
.6.....	105½	106½	107	108	108½	109½	110½	111	112	112½
.7.....	106	106½	107½	108	109	110	110½	111½	112	113
.8.....	106	107	107½	108½	109½	110	111	111½	112½	113½
.9.....	106½	107	108	108½	109½	110½	111	112	112½	113½
43.0.....	106½	107½	108	109	110	110½	111½	112	113	114
.1.....	107	107½	108½	109	110	111	111½	112½	113½	114
.2.....	107	108	108½	109½	110½	111	112	112½	113½	114½
.3.....	107½	108	109	109½	110½	111½	112	113	114	114½
.4.....	107½	108½	109	110	111	111½	112½	113	114	115
.5.....	108	108½	109½	110	111	112	112½	113½	114½	115
.6.....	108	109	109½	110½	111½	112	113	113½	114½	115½
.7.....	108½	109	110	110½	111½	112½	113	114	115	115½
.8.....	108½	109½	110	111	112	112½	113½	114½	115	116
.9.....	109	109½	110½	111	112	113	113½	114½	115½	116

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
44.0	109	110	110½	111½	112½	113	114	115	115½	116½
.1	109½	110	111	111½	112½	113½	114	115	116	116½
.2	109½	110½	111	112	113	113½	114½	115½	116	117
.3	110	110½	111½	112½	113	114	114½	115½	116½	117
.4	110	111	111½	112½	113½	114	115	116	116½	117½
.5	110½	111	112	113	113½	114½	115½	116	117	118
.6	110½	111½	112	113	114	114½	115½	116½	117	118
.7	111	111½	112½	113½	114	115	116	116½	117½	118½
.8	111	112	112½	113½	114½	115	116	117	117½	118½
.9	111½	112	113	114	114½	115½	116½	117	118	119
45.0	111½	112½	113	114	115	115½	116½	117½	118	119
.1	112	112½	113½	114½	115	116	117	117½	118½	119½
.2	112	113	113½	114½	115½	116	117	118	119	119½
.3	112½	113	114	115	115½	116½	117½	118	119	120
.4	112½	113½	114	115	116	116½	117½	118½	119½	120
.5	113	113½	114½	115½	116	117	118	118½	119½	120½
.6	113	114	114½	115½	116½	117	118	119	120	120½
.7	113½	114	115	116	116½	117½	118½	119	120	121
.8	113½	114½	115	116	117	118	118½	119½	120½	121
.9	114	114½	115½	116½	117	118	119	119½	120½	121½
46.0	114	115	115½	116½	117½	118½	119	120	121	121½
.1	114½	115	116	117	117½	118½	119½	120½	121	122
.2	114½	115½	116	117	118	119	119½	120½	121½	122½
.3	115	115½	116½	117½	118	119	120	121	121½	122½
.4	115	116	116½	117½	118½	119½	120	121	122	123
.5	115½	116	117	118	118½	119½	120½	121½	122	123
.6	115½	116½	117	118	119	120	120½	121½	122½	123½
.7	116	116½	117½	118½	119	120	121	122	122½	123½
.8	116	117	117½	118½	119½	120½	121	122	123	124
.9	116	117	118	119	119½	120½	121½	122½	123	124
47.0	116½	117½	118	119	120	121	121½	122½	123½	124½
.1	116½	117½	118½	119½	120	121	122	123	124	124½
.2	117	118	118½	119½	120½	121½	122	123	124	125
.3	117	118	119	120	120½	121½	122½	123½	124½	125
.4	117½	118½	119	120	121	122	123	123½	124½	125½
.5	117½	118½	119½	120½	121	122	123	124	125	125½
.6	118	119	119½	120½	121½	122½	123½	124	125	126
.7	118	119	120	121	122	122½	123½	124½	125½	126
.8	118½	119½	120	121	122	123	124	124½	125½	126½
.9	118½	119½	120½	121½	122½	123	124	125	126	127

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
48.0	119	120	120½	121½	122½	123½	124½	125	126	127
.1	119	120	121	122	123	123½	124½	125½	126½	127½
.2	119½	120½	121	122	123	124	125	125½	126½	127½
.3	119½	120½	121½	122½	123½	124	125	126	127	128
.4	120	121	121½	122½	123½	124½	125½	126½	127	128
.5	120	121	122	123	124	124½	125½	126½	127½	128½
.6	120½	121½	122½	123	124	125	126	127	127½	128½
.7	120½	121½	122½	123½	124½	125	126	127	128	129
.8	121	122	123	123½	124½	125½	126½	127½	128	129
.9	121	122	123	124	125	125½	120½	127½	128½	129½
49.0	121½	122½	123½	124	125	126	127	128	129	129½
.1	121½	122½	123½	124½	125½	126	127	128	129	130
.2	122	123	124	124½	125½	126½	127½	128½	129½	130
.3	122	123	124	125	126	127	127½	128½	129½	130½
.4	122½	123½	124½	125	126	127	128	129	130	130½
.5	122½	123½	124½	125½	126½	127½	128	129	130	131
.6	123	124	125	125½	126½	127½	128½	129½	130½	131½
.7	123	124	125	126	127	128	128½	129½	130½	131½
.8	123½	124½	125½	126	127	128	129	130	131	132
.9	123½	124½	125½	126½	127½	128½	129	130	131	132
50.0	124	125	126	126½	127½	128½	129½	130½	131½	132½
.1	124	125	126	127	128	129	130	130½	131½	132½
.2	124½	125½	126½	127	128	129	130	131	132	133
.3	124½	125½	126½	127½	128½	129½	130½	131	132	133
.4	125	126	127	127½	128½	129½	130½	131½	132½	133½
.5	125	126	127	128	129	130	131	131½	132½	133½
.6	125½	126½	127½	128	129	130	131	132	133	134
.7	125½	126½	127½	128½	129½	130½	131½	132½	133	134
.8	126	127	128	128½	129½	130½	131½	132½	133½	134½
.9	126	127	128	129	130	131	132	133	133½	134½
51.0	126½	127½	128½	129	130	131	132	133	134	135
.1	126½	127½	128½	129½	130½	131½	132½	133½	134½	135
.2	127	128	129	129½	130½	131½	132½	133½	134½	135½
.3	127	128	129	130	131	132	133	134	135	136
.4	127½	128½	129½	130	131	132	133	134	135	136
.5	127½	128½	129½	130½	131½	132½	133½	134½	135½	136½
.6	128	129	130	131	131½	132½	133½	134½	135½	136½
.7	128	129	130	131	132	133	134	135	136	137
.8	128½	129½	130½	131½	132	133	134	135	136	137
.9	128½	129½	130½	131½	132½	133½	134½	135½	136½	137½

Lengths.	27. MEAN DIAMETERS.									
	27.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
52.0	129	130	131	132	132½	133½	134½	135½	136½	137½
.1	129	130	131	132	133	134	135	136	137	138
.2	129½	130½	131½	132½	133	134	135	136	137	138
.3	129½	130½	131½	132½	133½	134½	135½	136½	137½	138½
.4	130	131	132	133	134	134½	135½	136½	137½	138½
.5	130	131	132	133	134	135	136	137	138	139
.6	130½	131½	132½	133½	134½	135	136	137	138	139
.7	130½	131½	132½	133½	134½	135½	136½	137½	138½	139½
.8	131	132	133	134	135	136	137	137½	138½	139½
.9	131	132	133	134	135	136	137	138	139	140
53.0	131½	132½	133½	134½	135½	136½	137½	138½	139½	140½
.1	131½	132½	133½	134½	135½	136½	137½	138½	139½	140½
.2	132	133	134	135	136	137	138	139	140	141
.3	132	133	134	135	136	137	138	139	140	141
.4	132½	133½	134½	135½	136½	137½	138½	139½	140½	141½
.5	132½	133½	134½	135½	136½	137½	138½	139½	140½	141½
.6	133	134	135	136	137	138	139	140	141	142
.7	133	134	135	136	137	138	139	140	141	142
.8	133½	134½	135½	136½	137½	138½	139½	140½	141½	142½
.9	133½	134½	135½	136½	137½	138½	139½	140½	141½	142½
54.0	134	135	136	137	138	139	140	141	142	143
.1	134	135	136	137	138	139	140	141	142	143
.2	134½	135½	136½	137½	138½	139½	140½	141½	142½	143½
.3	134½	135½	136½	137½	138½	139½	140½	141½	142½	143½
.4	135	136	137	138	139	140	141	142	143	144
.5	135	136	137	138	139	140	141	142	143	144
.6	135½	136½	137½	138½	139½	140½	141½	142½	143½	144½
.7	135½	136½	137½	138½	139½	140½	141½	142½	143½	145
.8	136	137	138	139	140	141	142	143	144	145
.9	136	137	138	139	140	141	142	143	144½	145½
55.0	136½	137½	138½	139½	140½	141½	142½	143½	144½	145½
.1	136½	137½	138½	139½	140½	141½	142½	143½	145	146
.2	137	138	139	140	141	142	143	144	145	146
.3	137	138	139	140	141	142	143	144½	145½	146½
.4	137½	138½	139½	140½	141½	142½	143½	144½	145½	146½
.5	137½	138½	139½	140½	141½	142½	143½	145	146	147
.6	138	139	140	141	142	143	144	145	146	147
.7	138	139	140	141	142	143	144½	145½	146½	147½
.8	138½	139½	140½	141½	142½	143½	144½	145½	146½	147½
.9	138½	139½	140½	141½	142½	143½	145	146	147	148

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
56.0	139	140	141	142	143	144	145	146	147	148
.1	139	140	141	142	143	144	145½	146½	147½	148½
.2	139½	140½	141½	142½	143½	144½	145½	146½	147½	148½
.3	139½	140½	141½	142½	143½	145	146	147	148	149
.4	140	141	142	143	144	145	146	147	148	149½
.5	140	141	142	143	144	145½	146½	147½	148½	149½
.6	140½	141½	142½	143½	144½	145½	146½	147½	148½	150
.7	140½	141½	142½	143½	144½	146	147	148	149	150
.8	141	142	143	144	145	146	147	148	149½	150½
.9	141	142	143	144	145	146½	147½	148½	149½	150½
57.0	141½	142½	143½	144½	145½	146½	147½	148½	150	151
.1	141½	142½	143½	144½	146	147	148	149	150	151
.2	142	143	144	145	146	147	148	149	150½	151½
.3	142	143	144	145	146½	147½	148½	149½	150½	151½
.4	142½	143½	144½	145½	146½	147½	148½	149½	151	152
.5	142½	143½	144½	145½	147	148	149	150	151	152
.6	143	144	145	146	147	148	149	150½	151½	152½
.7	143	144	145	146	147½	148½	149½	150½	151½	152½
.8	143½	144½	145½	146½	147½	148½	149½	151	152	153
.9	143½	144½	145½	146½	148	149	150	151	152	153
58.0	144	145	146	147	148	149	150	151½	152½	153½
.1	144	145	146	147	148½	149½	150½	151½	152½	154
.2	144½	145½	146½	147½	148½	149½	150½	152	153	154
.3	144½	145½	146½	147½	149	150	151	152	153	154½
.4	145	146	147	148	149	150	151½	152½	153½	154½
.5	145	146	147	148	149½	150½	151½	152½	153½	155
.6	145	146½	147½	148½	149½	150½	152	153	154	155
.7	145½	146½	147½	148½	150	151	152	153	154	155½
.8	145½	147	148	149	150	151	152½	153½	154½	155½
.9	146	147	148	149½	150½	151½	152½	153½	155	156
59.0	146	147½	148½	149½	150½	151½	153	154	155	156
.1	146½	147½	148½	150	151	152	153	154	155½	156½
.2	146½	148	149	150	151	152	153½	154½	155½	156½
.3	147	148	149	150½	151½	152½	153½	154½	156	157
.4	147	148½	149½	150½	151½	152½	154	155	156	157
.5	147½	148½	149½	151	152	153	154	155	156½	157½
.6	147½	149	150	151	152	153	154½	155½	156½	157½
.7	148	149	150	151½	152½	153½	154½	155½	157	158
.8	148	149½	150½	151½	152½	154	155	156	157	158½
.9	148½	149½	150½	152	153	154	155	156½	157½	158½

Lengths.	27. MEAN DIAMETERS.									
	27.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
60.0	148⅓	150	151	152	153	154½	155½	156½	157½	159
.1	149	150	151	152½	153½	154½	155½	157	158	159
.2	149	150½	151½	152½	153½	155	156	157	158	159½
.3	149½	150½	151½	153	154	155	156	157½	158½	159½
.4	149½	151	152	153	154	155½	156½	157½	158½	160
.5	150	151	152	153½	154¼	155½	156½	158	159	160
.6	150	151½	152½	153½	154½	156	157	158	159	160½
.7	150½	151½	152½	154	155	156	157	158½	159½	160½
.8	150½	152	153	154	155	156½	157½	158½	160	161
.9	151	152	153	154½	155½	156½	157½	159	160	161

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
31.0	82½	83	84	84½	85	85½	86	87	87½	88
.1	83	83½	84	84½	85½	86	86½	87	87½	88½
.2	83	84	84½	85	85½	86	87	87½	88	88½
.3	83½	84	84½	85	86	86½	87	87½	88½	89
.4	83½	84½	85	85½	86	86½	87½	88	88½	89
.5	84	84½	85	86	86½	87	87½	88	89	89½
.6	84	85	85½	86	86½	87½	88	88½	89	89½
.7	84½	85	85½	86½	87	87½	88	89	89½	90
.8	85	85½	86	86½	87	88	88½	89	89½	90½
.9	85	85½	86½	87	87½	88	88½	89½	90	90½
32.0	85½	86	86½	87	88	88½	89	89½	90	91
.1	85½	86	87	87½	88	88½	89½	90	90½	91
.2	86	86½	87	87½	88½	89	89½	90	91	91½
.3	86	86½	87½	88	88½	89	90	90½	91	91½
.4	86½	87	87½	88	89	89½	90	90½	91½	92
.5	86½	87½	88	88½	89	90	90½	91	91½	92½
.6	87	87½	88	89	89½	90	90½	91½	92	92½
.7	87	88	88½	89	89½	90½	91	91½	92	93
.8	87½	88	88½	89½	90	90½	91	92	92½	93
.9	87½	88½	89	89½	90	91	91½	92	93	93½
33.0	88	88½	89	90	90½	91	92	92½	93	93½
.1	88	89	89½	90	91	91½	92	92½	93½	94
.2	88½	89	90	90½	91	91½	92½	93	93½	94½
.3	89	89½	90	90½	91½	92	92½	93½	94	94½
.4	89	89½	90½	91	91½	92	93	93½	94	95
.5	89½	90	90½	91	92	92½	93	94	94½	95
.6	89½	90	91	91½	92	93	93½	94	95	95½
.7	90	90½	91	92	92½	93	93½	94½	95	95½
.8	90	90½	91½	92	92½	93½	94	94½	95½	96
.9	90½	91	91½	92½	93	93½	94½	95	95½	96½

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
34.0	90½	91½	92	92½	93	94	94½	95	96	96½
.1	91	91½	92	93	93½	94	95	95½	96	97
.2	91	92	92½	93	94	94½	95	96	96½	97
.3	91½	92	92½	93½	94	94½	95½	96	96½	97½
.4	91½	92½	93	93½	94½	95	95½	96½	97	97½
.5	92	92½	93½	94	94½	95½	96	96½	97½	98
.6	92	93	93½	94	95	95½	96	97	97½	98½
.7	92½	93	94	94½	95	96	96½	97	98	98½
.8	93	93½	94	95	95½	96	97	97½	98	99
.9	93	93½	94½	95	95½	96½	97	97½	98½	99
35.0	93½	94	94½	95½	96	96½	97½	98	98½	99½
.1	93½	94	95	95½	96½	97	97½	98½	99	99½
.2	94	94½	95	96	96½	97	98	98½	99½	100
.3	94	95	95½	96	97	97½	98	99	99½	100
.4	94½	95	95½	96½	97	98	98½	99	100	100½
.5	94½	95½	96	96½	97½	98	98½	99½	100	101
.6	95	95½	96½	97	97½	98½	99	99½	100½	101
.7	95	96	96½	97	98	98½	99½	100	100½	101½
.8	95½	96	97	97½	98	99	99½	100½	101	101½
.9	95½	96½	97	98	98½	99	100	100½	101	102
36.0	96	96½	97½	98	98½	99½	100	101	101½	102
.1	96	97	97½	98½	99	99½	100½	101	102	102½
.2	96½	97	98	98½	99½	100	100½	101½	102	103
.3	97	97½	98	99	99½	100	101	101½	102½	103
.4	97	97½	98½	99	100	100½	101	102	102½	103½
.5	97½	98	98½	99½	100	101	101½	102	103	103½
.6	97½	98½	99	99½	100½	101	102	102½	103	104
.7	98	98½	99	100	100½	101½	102	103	103½	104
.8	98	99	99½	100	101	101½	102½	103	104	104½
.9	98½	99	100	100½	101	102	102½	103½	104	105
37.0	98½	99½	100	101	101½	102	103	103½	104½	105
.1	99	99½	100½	101	101½	102½	103	104	104½	105½
.2	99	100	100½	101½	102	102½	103½	104	105	105½
.3	99½	100	101	101½	102½	103	103½	104½	105	106
.4	99½	100½	101	102	102½	103½	104	104½	105½	106
.5	100	100½	101½	102	103	103½	104½	105	106	106½
.6	100	101	101½	102½	103	104	104½	105½	106	107
.7	100½	101	102	102½	103½	104	105	105½	106½	107
.8	101	101½	102	103	103½	104½	105	106	106½	107½
.9	101	101½	102½	103	104	104½	105½	106	107	107½

Lengths.	28. MEAN DIAMETERS.									
	28.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
38.0	101½	102	102½	103½	104	105	105½	106½	107	108
.1	101½	102½	103	103½	104½	105	106	106½	107½	108
.2	102	102½	103½	104	105	105½	106	107	107½	108½
.3	102	103	103½	104½	105	106	106½	107½	108	109
.4	102½	103	104	104½	105½	106	107	107½	108½	109
.5	102½	103½	104	105	105½	106½	107	108	108½	109½
.6	103	103½	104½	105	106	106½	107½	108	109	109½
.7	103	104	104½	105½	106	107	107½	108½	109	110
.8	103½	104	105	105½	106½	107	108	108½	109½	110
.9	103½	104½	105	106	106½	107½	108	109	109½	110½
39.0	104	104½	105½	106	107	107½	108½	109	110	110½
.1	104	105	105½	106½	107	108	108½	109½	110½	111
.2	104½	105	106	106½	107½	108½	109	110	110½	111½
.3	105	105½	106½	107	108	108½	109½	110	111	111½
.4	105	106	106½	107½	108	109	109½	110½	111	112
.5	105½	106	107	107½	108½	109	110	110½	111½	112
.6	105½	106½	107	108	108½	109½	110	111	111½	112½
.7	106	106½	107½	108	109	109½	110½	111	112	112½
.8	106	107	107½	108½	109	110	110½	111½	112	113
.9	106½	107	108	108½	109½	110	111	111½	112½	113½
40.0	106½	107½	108	109	109½	110½	111	112	113	113½
.1	107	107½	108½	109	110	110½	111½	112½	113	114
.2	107	108	108½	109½	110	111	112	112½	113½	114
.3	107½	108	109	109½	110½	111½	112	113	113½	114½
.4	107½	108½	109	110	111	111½	112½	113	114	114½
.5	108	108½	109½	110½	111	112	112½	113½	114	115
.6	108	109	110	110½	111½	112	113	113½	114½	115½
.7	108½	109½	110	111	111½	112½	113	114	115	115½
.8	109	109½	110½	111	112	112½	113½	114½	115	116
.9	109	110	110½	111½	112	113	113½	114½	115½	116
41.0	109½	110	111	111½	112½	113	114	115	115½	116½
.1	109½	110½	111	112	112½	113½	114½	115	116	116½
.2	110	110½	111½	112	113	114	114½	115½	116	117
.3	110	111	111½	112½	113½	114	115	115½	116½	117½
.4	110½	111	112	112½	113½	114½	115	116	117	117½
.5	110½	111½	112	113	114	114½	115½	116	117	118
.6	111	111½	112½	113½	114	115	115½	116½	117½	118
.7	111	112	112½	113½	114½	115	116	117	117½	118½
.8	111½	112	113	114	114½	115½	116	117	118	118½
.9	111½	112½	113½	114	115	115½	116½	117½	118	119

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
42.0	112	113	113½	114½	115	116	117	117½	118½	119½
.1	112	113	114	114½	115½	116½	117	118	118½	119½
.2	112½	113½	114	115	115½	116½	117½	118	119	120
.3	113	113½	114½	115	116	117	117½	118½	119½	120
.4	113	114	114½	115½	116½	117	118	118½	119½	120½
.5	113½	114	115	115½	116½	117½	118	119	120	120½
.6	113½	114½	115	116	117	117½	118½	119½	120	121
.7	114	114½	115½	116½	117	118	119	119½	120½	121½
.8	114	115	115½	116½	117½	118	119	120	120½	121½
.9	114½	115	116	117	117½	118½	119½	120	121	122
43.0	114½	115½	116½	117	118	119	119½	120½	121½	122
.1	115	115½	116½	117½	118	119	120	120½	121½	122½
.2	115	116	117	117½	118½	119½	120	121	122	122½
.3	115½	116	117	118	118½	119½	120½	121½	122	123
.4	115½	116½	117½	118	119	120	120½	121½	122½	123
.5	116	117	117½	118½	119½	120	121	122	122½	123½
.6	116	117	118	118½	119½	120½	121½	122	123	124
.7	116½	117½	118	119	120	120½	121½	122½	123	124
.8	117	117½	118½	119½	120	121	122	122½	123½	124½
.9	117	118	118½	119½	120½	121	122	123	124	124½
44.0	117½	118	119	120	120½	121½	122½	123	124	125
.1	117½	118½	119	120	121	122	122½	123½	124½	125
.2	118	118½	119½	120½	121	122	123	124	124½	125½
.3	118	119	120	120½	121½	122½	123	124	125	126
.4	118½	119	120	121	122	122½	123½	124½	125	126
.5	118½	119½	120½	121	122	123	124	124½	125½	126½
.6	119	119½	120½	121½	122½	123	124	125	126	126½
.7	119	120	121	121½	122½	123½	124½	125	126	127
.8	119½	120½	121	122	123	123½	124½	125½	126½	127
.9	119½	120½	121½	122½	123	124	125	125½	126½	127½
45.0	120	121	121½	122½	123½	124½	125	126	127	128
.1	120	121	122	123	123½	124½	125½	126½	127	128
.2	120½	121½	122	123	124	125	125½	126½	127½	128½
.3	121	121½	122½	123½	124	125	126	127	128	128½
.4	121	122	123	123½	124½	125½	126½	127	128	129
.5	121½	122	123	124	125	125½	126½	127½	128½	129
.6	121½	122½	123½	124	125	126	127	127½	128½	129½
.7	122	122½	123½	124½	125½	126	127	128	129	130
.8	122	123	124	124½	125½	126½	127½	128½	129	130
.9	122½	123	124	125	126	127	127½	128½	129½	130½

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
46.0	122½	123½	124½	125½	126	127	128	129	129½	130½
.1	123	124	124½	125½	126½	127½	128	129	130	131
.2	123	124	125	126	126½	127½	128½	129½	130½	131
.3	123½	124½	125	126	127	128	129	129½	130½	131½
.4	123½	124½	125½	126½	127	128	129	130	131	132
.5	124	125	125½	126½	127½	128½	129½	130	131	132
.6	124	125	126	127	128	128½	129½	130½	131½	132½
.7	124½	125½	126½	127	128	129	130	131	131½	132½
.8	125	125½	126½	127½	128½	129	130	131	132	133
.9	125	126	127	127½	128½	129½	130½	131½	132½	133
47.0	125½	126	127	128	129	130	130½	131½	132½	133½
.1	125½	126½	127½	128½	129	130	131	132	133	134
.2	126	126½	127½	128½	129½	130½	131½	132	133	134
.3	126	127	128	129	129½	130½	131½	132½	133½	134½
.4	126½	127½	128	129	130	131	132	132½	133½	134½
.5	126½	127½	128½	129½	130½	131	132	133	134	135
.6	127	128	128½	129½	130½	131½	132½	133½	134	135
.7	127	128	129	130	131	131½	132½	133½	134½	135½
.8	127½	128½	129	130	131	132	133	134	135	135½
.9	127½	128½	129½	130½	131½	132½	133	134	135	136
48.0	128	129	130	130½	131½	132½	133½	134½	135½	136½
.1	128	129	130	131	132	133	134	134½	135½	136½
.2	128½	129½	130½	131	132	133	134	135	136	137
.3	128½	129½	130½	131½	132½	133½	134½	135½	136	137
.4	129	130	131	132	132½	133½	134½	135½	136½	137½
.5	129½	130	131	132	133	134	135	136	137	137½
.6	129½	130½	131½	132½	133½	134	135	136	137	138
.7	130	130½	131½	132½	133½	134½	135½	136½	137½	138½
.8	130	131	132	133	134	135	135½	136½	137½	138½
.9	130½	131½	132	133	134	135	136	137	138	139
49.0	130½	131½	132½	133½	134½	135½	136½	137	138	139
.1	131	132	133	133½	134½	135½	136½	137½	138½	139½
.2	131	132	133	134	135	136	137	138	138½	139½
.3	131½	132½	133½	134	135	136	137	138	139	140
.4	131½	132½	133½	134½	135½	136½	137½	138½	139½	140½
.5	132	133	134	135	135½	136½	137½	138½	139½	140½
.6	132	133	134	135	136	137	138	139	140	141
.7	132½	133½	134½	135½	136½	137½	138	139	140	141
.8	132½	133½	134½	135½	136½	137½	138½	139½	140½	141½
.9	133	134	135	136	137	138	139	139½	140½	141½

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
50.0	133½	134	135	136	137	138	139	140	141	142
.1	133½	134½	135½	136½	137½	138½	139½	140½	141½	142½
.2	134	135	135½	136½	137½	138½	139½	140½	141½	142½
.3	134	135	136	137	138	139	140	141	142	143
.4	134½	135½	136½	137	138	139	140	141	142	143
.5	134½	135½	136½	137½	138½	139½	140½	141½	142½	143½
.6	135	136	137	138	139	139½	140½	141½	142½	143½
.7	135	136	137	138	139	140	141	142	143	144
.8	135½	136½	137½	138½	139½	140½	141½	142½	143½	144½
.9	135½	136½	137½	138½	139½	140½	141½	142½	142½	144½
51.0	136	137	138	139	140	141	142	143	144	145
.1	136	137	138	139	140	141	142	143	144	145
.2	136½	137½	138½	139½	140½	141½	142½	143½	144½	145½
.3	136½	137½	138½	139½	140½	141½	142½	143½	144½	145½
.4	137	138	139	140	141	142	143	144	145	146
.5	137½	138½	139	140	141	142	143	144	145	146
.6	137½	138½	139½	140½	141½	142½	143½	144½	145½	146½
.7	138	139	140	141	142	143	144	145	146	147
.8	138	139	140	141	142	143	144	145	146	147
.9	138½	139½	140½	141½	142½	143½	144½	145½	146½	147½
52.0	138½	139½	140½	141½	142½	143½	144½	145½	146½	147½
.1	139	140	141	142	143	144	145	146	147	148
.2	139	140	141	142	143	144	145	146	147	148
.3	139½	140½	141½	142½	143½	144½	145½	146½	147½	148½
.4	139½	140½	141½	142½	143½	144½	145½	146½	148	149
.5	140	141	142	143	144	145	146	147	148	149
.6	140	141	142	143	144	145½	146½	147½	148½	149½
.7	140½	141½	142½	143½	144½	145½	146½	147½	148½	149½
.8	140½	142	143	144	145	146	147	148	149	150
.9	141	142	143	144	145	146	147	148	149	150
53.0	141½	142½	143½	144½	145½	146½	147½	148½	149½	150½
.1	141½	142½	143½	144½	145½	146½	147½	148½	149½	151
.2	142	143	144	145	146	147	148	149	150	151
.3	142	143	144	145	146	147	148	149½	150½	151½
.4	142½	143½	144½	145½	146½	147½	148½	149½	150½	151½
.5	142½	143½	144½	145½	146½	147½	149	150	151	152
.6	143	144	145	146	147	148	149	150	151	152
.7	143	144	145	146	147½	148½	149½	150½	151½	152½
.8	143½	144½	145½	146½	147½	148½	149½	150½	151½	153
.9	143½	144½	145½	147	148	149	150	151	152	153

Lengths.	28. MEAN DIAMETERS.									
	28.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
54.0	144	145	146	147	148	149	150	151	152½	153½
.1	144	145	146½	147½	148½	149½	150½	151½	152½	153½
.2	144½	145½	146½	147½	148½	149½	150½	152	153	154
.3	144½	146	147	148	149	150	151	152	153	154
.4	145	146	147	148	149	150	151½	152½	153½	154½
.5	145½	146½	147½	148½	149½	150½	151½	152½	153½	155
.6	145½	146½	147½	148½	149½	151	152	153	154	155
.7	146	147	148	149	150	151	152	153	154½	155½
.8	146	147	148	149	150½	151½	152½	153½	154½	155½
.9	146½	147½	148½	149½	150½	151½	152½	153½	155	156
55.0	146½	147½	148½	150	151	152	153	154	155	156
.1	147	148	149	150	151	152	153	154½	155½	156½
.2	147	148	149½	150½	151½	152½	153½	154½	155½	157
.3	147½	148½	149½	150½	151½	152½	154	155	156	157
.4	147½	148½	150	151	152	153	154	155	156	157½
.5	148	149	150	151	152	153½	154½	155½	156½	157½
.6	148	149½	150½	151½	152½	153½	154½	155½	157	158
.7	148½	149½	150½	151½	152½	154	155	156	157	158
.8	148½	150	151	152	153	154	155	156½	157½	158½
.9	149	150	151	152	153½	154½	155½	156½	157½	158½
56.0	149½	150½	151½	152½	153½	154½	155½	157	158	159
.1	149½	150½	151½	153	154	155	156	157	158	159½
.2	150	151	152	153	154	155	156½	157½	158½	159½
.3	150	151	152	153½	154½	155½	156½	157½	159	160
.4	150½	151½	152½	153½	154½	156	157	158	159	160
.5	150½	151½	153	154	155	156	157	158	159½	160½
.6	151	152	153	154	155	156½	157½	158½	159½	160½
.7	151	152	153½	154½	155½	156½	157½	159	160	161
.8	151½	152½	153½	154½	156	157	158	159	160	161½
.9	151½	153	154	155	156	157	158	159½	160½	161½
57.0	152	153	154	155	156½	157½	158½	159½	160½	162
.1	152	153½	154½	155½	156½	157½	159	160	161	162
.2	152½	153½	154½	156	157	158	159	160	161½	162½
.3	152½	154	155	156	157	158	159½	160½	161½	162½
.4	153	154	155	156½	157½	158½	159½	161	162	163
.5	153½	154½	155½	156½	157½	159	160	161	162	163½
.6	153½	154½	155½	157	158	159	160	161½	162½	163½
.7	154	155	156	157	158	159½	160½	161½	162½	164
.8	154	155	156½	157½	158½	159½	160½	162	163	164
.9	154½	155½	156½	157½	159	160	161	162	163½	164½

Lengths.	28. MEAN DIAMETERS.									
	28.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
58.0	154½	155½	157	158	159	160	161½	162½	163½	164½
.1	155	156	157	158	159½	160½	161½	162½	164	165
.2	155	156	157½	158½	159½	160½	162	163	164	165½
.3	155½	156½	157½	159	160	161	162	163½	164½	165½
.4	155½	157	158	159	160	161½	162½	163½	164½	166
.5	156	157	158	159½	160½	161½	162½	164	165	166
.6	156	157½	158½	159½	160½	162	163	164	165½	166½
.7	156½	157½	158½	160	161	162	163	164½	165½	166½
.8	156½	158	159	160	161	162½	163½	164½	166	167
.9	157	158	159½	160½	161½	162½	164	165	166	167½
59.0	157½	158½	159½	160½	162	163	164	165	166½	167½
.1	157½	158½	160	161	162	163	164½	165½	166½	168
.2	158	159	160	161	162½	163½	164½	166	167	168
.3	158	159	160½	161½	162½	164	165	166	167	168½
.4	158½	159½	160½	161½	163	164	165	166½	167½	168½
.5	158½	159½	161	162	163	164½	165½	166½	168	169
.6	159	160	161	162½	163½	164½	166	167	168	169
.7	159	160½	161½	162½	163½	165	166	167	168½	169½
.8	159½	160½	161½	163	164	165	166½	167½	168½	170
.9	159½	161	162	163	164½	165½	166½	168	169	170
60.0	160	161	162	163½	164½	165½	167	168	169	170½
.1	160	161½	162½	163½	165	166	167	168½	169½	170½
.2	160½	161½	163	164	165	166½	167½	168½	170	171
.3	160½	162	163	164	165½	166½	167½	169	170	171
.4	161	162	163½	164½	165½	167	168	169	170½	171½
.5	161½	162½	163½	164½	166	167	168½	169½	170½	172
.6	161½	162½	164	165	166	167½	168½	169½	171	172
.7	162	163	164	165½	166½	167½	169	170	171	172½
.8	162	163	164½	165½	166½	168	169	170½	171½	172½
.9	162½	163½	164½	166	167	168	169½	170½	171½	173

Lengths.	29. MEAN DIAMETERS.									
	29.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
32.0	91½	92	93	93½	94	94½	95½	96	96½	97½
.1	92	92½	93	93½	94½	95	95½	96½	97	97½
.2	92	92½	93½	94	94½	95½	96	96½	97	98
.3	92½	93	93½	94½	95	95½	96	97	97½	98
.4	92½	93½	94	94½	95	96	96½	97	98	98½
.5	93	93½	94	95	95½	96	97	97½	98	99
.6	93	94	94½	95	96	96½	97	98	98½	99
.7	93½	94	95	95½	96	97	97½	98	98½	99½
.8	94	94½	95	95½	96½	97	97½	98½	99	99½
.9	94	94½	95½	96	96½	97½	98	98½	99½	100

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	94½	95	95½	96½	97	97½	98½	99	99½	100½
.1	94½	95½	96	96½	97½	98	98½	99½	100	100½
.2	95	95½	96	97	97½	98	99	99½	100	101
.3	95	96	96½	97	98	98½	99	100	100½	101
.4	95½	96	97	97½	98	99	99½	100	101	101½
.5	96	96½	97	98	98½	99	100	100½	101	102
.6	96	96½	97½	98	98½	99½	100	101	101½	102
.7	96½	97	97½	98½	99	99½	100½	101	102	102½
.8	96½	97½	98	98½	99½	100	100½	101½	102	102½
.9	97	97½	98½	99	99½	100½	101	101½	102½	103
34.0	97	98	98½	99	100	100½	101½	102	102½	103½
.1	97½	98	99	99½	100	101	101½	102½	103	103½
.2	98	98½	99	100	100½	101	102	102½	103½	104
.3	98	99	99½	100	101	101½	102	103	103½	104½
.4	98½	99	99½	100½	101	102	102½	103	104	104½
.5	98½	99½	100	100½	101½	102	103	103½	104	105
.6	99	99½	100½	101	101½	102½	103	104	104½	105
.7	99	100	100½	101½	102	102½	103½	104	105	105½
.8	99½	100	101	101½	102½	103	103½	104½	105	106
.9	100	100½	101	102	102½	103½	104	104½	105½	106
35.0	100	101	101½	102	103	103½	104½	105	105½	106½
.1	100½	101	102	102½	103	104	104½	105½	106	106½
.2	100½	101½	102	102½	103½	104	105	105½	106½	107
.3	101	101½	102½	103	103½	104½	105	106	106½	107½
.4	101	102	102½	103½	104	104½	105½	106	107	107½
.5	101½	102	103	103½	104½	105	106	106½	107	108
.6	102	102½	103	104	104½	105½	106	107	107½	108
.7	102	103	103½	104	105	105½	106½	107	108	108½
.8	102½	103	104	104½	105	106	106½	107½	108	109
.9	102½	103½	104	105	105½	106	107	107½	108½	109
36.0	103	103½	104½	105	106	106½	107	108	108½	109½
.1	103	104	104½	105½	106	107	107½	108½	109	109½
.2	103½	104	105	105½	106½	107	108	108½	109½	110
.3	104	104½	105	106	106½	107½	108	109	109½	110½
.4	104	105	105½	106	107	107½	108½	109	110	110½
.5	104½	105	106	106½	107½	108	108½	109½	110	111
.6	104½	105½	106	107	107½	108½	109	110	110½	111½
.7	105	105½	106½	107	108	108½	109½	110	111	111½
.8	105	106	106½	107½	108	109	109½	110½	111	112
.9	105½	106	107	107½	108½	109	110	110½	111½	112

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	106	106½	107½	108	108½	109½	110	111	111½	112½
.1	106	107	107½	108½	109	110	110½	111½	112	113
.2	106½	107	108	108½	109½	110	111	111½	112½	113
.3	106½	107½	108	109	109½	110½	111	112	112½	113½
.4	107	107½	108½	109	110	110½	111½	112	113	113½
.5	107	108	108½	109½	110	111	111½	112½	113	114
.6	107½	108½	109	109½	110½	111½	112	113	113½	114½
.7	108	108½	109½	110	111	111½	112½	113	114	114½
.8	108	109	109½	110½	111	112	112½	113½	114	115
.9	108½	109	110	110½	111½	112	113	113½	114½	115
38.0	108½	109½	110	111	111½	112½	113	114	114½	115½
.1	109	109½	110½	111	112	112½	113½	114½	115	116
.2	109	110	110½	111½	112½	113	114	114½	115½	116
.3	109½	110½	111	112	112½	113½	114	115	115½	116½
.4	110	110½	111½	112	113	113½	114½	115	116	116½
.5	110	111	111½	112½	113	114	114½	115½	116	117
.6	110½	111	112	112½	113½	114	115	116	116½	117½
.7	110½	111½	112	113	113½	114½	115½	116	117	117½
.8	111	111½	112½	113½	114	115	115½	116½	117	118
.9	111	112	113	113½	114½	115	116	116½	117½	118
39.0	111½	112½	113	114	114½	115½	116	117	118	118½
.1	112	112½	113½	114	115	115½	116½	117½	118	119
.2	112	113	113½	114½	115	116	117	117½	118½	119
.3	112½	113	114	114½	115½	116½	117	118	118½	119½
.4	112½	113½	114	115	116	116½	117½	118	119	120
.5	113	113½	114½	115½	116	117	117½	118½	119½	120
.6	113	114	115	115½	116½	117	118	119	119½	120½
.7	113½	114½	115	116	116½	117½	118½	119	120	120½
.8	114	114½	115½	116	117	118	118½	119½	120	121
.9	114	115	115½	116½	117½	118	119	119½	120½	121½
40.0	114½	115	116	117	117½	118½	119	120	121	121½
.1	114½	115½	116	117	118	118½	119½	120½	121	122
.2	115	115½	116½	117½	118	119	120	120½	121½	122
.3	115	116	117	117½	118½	119	120	121	121½	122½
.4	115½	116½	117	118	118½	119½	120½	121	122	123
.5	116	116½	117½	118	119	120	120½	121½	122½	123
.6	116	117	117½	118½	119½	120	121	122	122½	123½
.7	116½	117	118	119	119½	120½	121	122	123	123½
.8	116½	117½	118½	119	120	120½	121½	122½	123	124
.9	117	118	118½	119½	120	121	122	122½	123½	124½

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
41.0	117	118	119	119½	120½	121½	122	123	124	124½
.1	117½	118½	119	120	121	121½	122½	123½	124	125
.2	118	118½	119½	120½	121	122	122½	123½	124½	125
.3	118	119	119½	120½	121½	122	123	124	124½	125½
.4	118½	119	120	121	121½	122½	123½	124	125	126
.5	118½	119½	120½	121	122	123	123½	124½	125½	126
.6	119	120	120½	121½	122½	123	124	125	125½	126½
.7	119	120	121	121½	122½	123½	124	125	126	127
.8	119½	120½	121	122	123	123½	124½	125½	126	127
.9	120	120½	121½	122½	123	124	125	125½	126½	127½
42.0	120	121	122	122½	123½	124½	125	126	127	127½
.1	120½	121	122	123	123½	124½	125½	126½	127	128
.2	120½	121½	122½	123	124	125	125½	126½	127½	128½
.3	121	122	122½	123½	124½	125	126	127	127½	128½
.4	121	122	123	124	124½	125½	126½	127	128	129
.5	121½	122½	123	124	125	126	126½	127½	128½	129
.6	122	122½	123½	124½	125	126	127	128	128½	129½
.7	122	123	124	124½	125½	126½	127	128	129	130
.8	122½	123	124	125	126	126½	127½	128½	129	130
.9	122½	123½	124½	125	126	127	128	128½	129½	130½
43.0	123	124	124½	125½	126½	127	128	129	130	130½
.1	123	124	125	126	126½	127½	128½	129½	130	131
.2	123½	124½	125	126	127	128	128½	129½	130½	131½
.3	124	124½	125½	126½	127½	128	129	130	130½	131½
.4	124	125	126	126½	127½	128½	129½	130	131	132
.5	124½	125	126	127	128	128½	129½	130½	131½	132
.6	124½	125½	126½	127½	128	129	130	131	131½	132½
.7	125	126	126½	127½	128½	129½	130	131	132	133
.8	125	126	127	128	128½	129½	130½	131½	132	133
.9	125½	126½	127½	128	129	130	131	131½	132½	133½
44.0	126	126½	127½	128½	129½	130	131	132	133	133½
.1	126	127	128	128½	129½	130½	131½	132½	133	134
.2	126½	127½	128	129	130	131	131½	132½	133½	134½
.3	126½	127½	128½	129½	130	131	132	133	134	134½
.4	127	128	128½	129½	130½	131½	132½	133	134	135
.5	127	128	129	130	131	131½	132½	133½	134½	135½
.6	127½	128½	129½	130	131	132	133	134	134½	135½
.7	128	128½	129½	130½	131½	132½	133	134	135	136
.8	128	129	130	131	131½	132½	133½	134½	135½	136
.9	128½	129½	130	131	132	133	134	134½	135½	136½

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
45.0	128½	129½	130½	131½	132	133	134	135	136	137
.1	129	130	130½	131½	132½	133½	134½	135½	136	137
.2	129	130	131	132	133	133½	134½	135½	136½	137½
.3	129½	130½	131½	132	133	134	135	136	137	137½
.4	130	130½	131½	132½	133½	134½	135	136	137	138
.5	130	131	132	133	133½	134½	135½	136½	137½	138½
.6	130½	131½	132	133	134	135	136	137	137½	138½
.7	130½	131½	132½	133½	134½	135	136	137	138	139
.8	131	132	133	133½	134½	135½	136½	137½	138½	139
.9	131	132	133	134	135	136	136½	137½	138½	139½
46.0	131½	132½	133½	134½	135	136	137	138	139	140
.1	132	132½	133½	134½	135½	136½	137½	138½	139	140
.2	132	133	134	135	136	136½	137½	138½	139½	140½
.3	132½	133½	134	135	136	137	138	139	140	140½
.4	132½	133½	134½	135½	136½	137½	138	139	140	141
.5	133	134	135	135½	136½	137½	138½	139½	140½	141½
.6	133	134	135	136	137	138	139	140	140½	141½
.7	133½	134½	135½	136½	137	138	139	140	141	142
.8	134	134½	135½	136½	137½	138½	139½	140½	141½	142½
.9	134	135	136	137	138	139	139½	140½	141½	142½
47.0	134½	135½	136½	137	138	139	140	141	142	143
.1	134½	135½	136½	137½	138½	139½	140½	141½	142	143
.2	135	136	137	138	138½	139½	140½	141½	142½	143½
.3	135	136	137	138	139	140	141	142	143	144
.4	135½	136½	137½	138½	139½	140	141	142	143	144
.5	136	137	137½	138½	139½	140½	141½	142½	143½	144½
.6	136	137	138	139	140	141	142	143	143½	144½
.7	136½	137½	138½	139	140	141	142	143	144	145
.8	136½	137½	138½	139½	140½	141½	142½	143½	144½	145½
.9	137	138	139	140	141	141½	142½	143½	144½	145½
48.0	137½	138	139	140	141	142	143	144	145	146
.1	137½	138½	139½	140½	141½	142½	143½	144½	145	146
.2	138	139	139½	140½	141½	142½	143½	144½	145½	146½
.3	138	139	140	141	142	143	144	145	146	147
.4	138½	139½	140½	141½	142	143	144	145	146	147
.5	138½	139½	140½	141½	142½	143½	144½	145½	146½	147½
.6	139	140	141	142	143	144	145	146	146½	147½
.7	139½	140	141	142	143	144	145	146	147	148
.8	139½	140½	141½	142½	143½	144½	145½	146½	147½	148½
.9	140	141	142	142½	143½	144½	145½	146½	147½	148½

Lengths.	29. MEAN DIAMETERS.									
	£29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
49.0.....	140	141	142	143	144	145	146	147	148	149
.1.....	140½	141½	142½	143½	144½	145½	146½	147½	148	149
.2.....	140½	141½	142½	143½	144½	145½	146½	147½	148½	149½
.3.....	141	142	143	144	145	146	147	148	149	150
.4.....	141½	142	143	144	145	146	147	148	149	150
.5.....	141½	142½	143½	144½	145½	146½	147½	148½	149½	150½
.6.....	142	143	144	145	146	147	148	149	150	151
.7.....	142	143	144	145	146	147	148	149	150	151
.8.....	142½	143½	144½	145½	146½	147½	148½	149½	150½	151½
.9.....	142½	143½	144½	145½	146½	147½	148½	149½	150½	151½
50.0.....	143	144	145	146	147	148	149	150	151	152
.1.....	143½	144	145	146	147	148	149	150½	151½	152½
.2.....	143½	144½	145½	146½	147½	148½	149½	150½	151½	152½
.3.....	144	145	146	147	148	149	150	151	152	153
.4.....	144	145	146	147	148	149	150	151	152	153
.5.....	144½	145½	146½	147½	148½	149½	150½	151½	152½	153½
.6.....	144½	145½	146½	147½	148½	149½	150½	152	153	154
.7.....	145	146	147	148	149	150	151	152	153	154
.8.....	145½	146½	147½	148½	149½	150½	151½	152½	153½	154½
.9.....	145½	146½	147½	148½	149½	150½	151½	152½	153½	154½
51.0.....	146	147	148	149	150	151	152	153	154	155
.1.....	146	147	148	149	150	151	152	153½	154½	155½
.2.....	146½	147½	148½	149½	150½	151½	152½	153½	154½	155½
.3.....	146½	147½	148½	149½	151	152	153	154	155	156
.4.....	147	148	149	150	151	152	153	154	155	156
.5.....	147½	148½	149½	150½	151½	152½	153½	154½	155½	156½
.6.....	147½	148½	149½	150½	151½	152½	153½	155	156	157
.7.....	148	149	150	151	152	153	154	155	156	157
.8.....	148	149	150	151	152	153½	154½	155½	156½	157½
.9.....	148½	149½	150½	151½	152½	153½	154½	155½	156½	158
52.0.....	148½	149½	150½	152	153	154	155	156	157	158
.1.....	149	150	151	152	153	154	155	156½	157½	158½
.2.....	149½	150½	151½	152½	153½	154½	155½	156½	157½	158½
.3.....	149½	150½	151½	152½	153½	154½	156	157	158	159
.4.....	150	151	152	153	154	155	156	157	158	159½
.5.....	150	151	152	153	154½	155½	156½	157½	158½	159½
.6.....	150½	151½	152½	153½	154½	155½	156½	158	159	160
.7.....	150½	151½	153	154	155	156	157	158	159	160
.8.....	151	152	153	154	155	156	157½	158½	159½	160½
.9.....	151½	152½	153½	154½	155½	156½	157½	158½	159½	161

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
53.0	151½	152½	153½	154½	156	157	158	159	160	161
.1	152	153	154	155	156	157	158	159½	160½	161½
.2	152	153	154	155½	156½	157½	158½	159½	160½	161½
.3	152½	153½	154½	155½	156½	157½	159	160	161	162
.4	152½	153½	155	156	157	158	159	160	161	162½
.5	153	154	155	156	157	158½	159½	160½	161½	162½
.6	153½	154½	155½	156½	157½	158½	159½	161	162	163
.7	153½	154½	155½	156½	158	159	160	161	162	163
.8	154	155	156	157	158	159	160½	161½	162½	163½
.9	154	155	156½	157½	158½	159½	160½	161½	162½	164
54.0	154½	155½	156½	157½	158½	160	161	162	163	164
.1	154½	156	157	158	159	160	161	162½	163½	164½
.2	155	156	157	158	159½	160½	161½	162½	163½	164½
.3	155½	156½	157½	158½	159½	160½	162	163	164	165
.4	155½	156½	157½	159	160	161	162	163	164½	165½
.5	156	157	158	159	160	161½	162½	163½	164½	165½
.6	156	157	158½	159½	160½	161½	162½	164	165	166
.7	156½	157½	158½	159½	161	162	163	164	165	166½
.8	156½	158	159	160	161	162	163	164½	165½	166½
.9	157	158	159	160	161½	162½	163½	164½	166	167
55.0	157½	158½	159½	160½	161½	162½	164	165	166	167
.1	157½	158½	159½	161	162	163	164	165½	166½	167½
.2	158	159	160	161	162	163½	164½	165½	166½	168
.3	158	159	160½	161½	162½	163½	164½	166	167	168
.4	158½	159½	160½	161½	163	164	165	166	167½	168½
.5	158½	160	161	162	163	164	165½	166½	167½	168½
.6	159	160	161	162½	163½	164½	165½	167	168	169
.7	159½	160½	161½	162½	163½	165	166	167	168	169½
.8	159½	160½	162	163	164	165	166	167½	168½	169½
.9	160	161	162	163	164½	165½	166½	167½	169	170
56.0	160	161	162½	163½	164½	165½	167	168	169	170
.1	160½	161½	162½	163½	165	166	167	168	169½	170½
.2	160½	162	163	164	165	166½	167½	168½	169½	171
.3	161	162	163	164½	165½	166½	167½	169	170	171
.4	161½	162½	163½	164½	165½	167	168	169	170½	171½
.5	161½	162½	164	165	166	167	168½	169½	170½	171½
.6	162	163	164	165	166½	167½	168½	169½	171	172
.7	162	163	164½	165½	166½	168	169	170	171	172½
.8	162½	163½	164½	166	167	168	169	170½	171½	172½
.9	162½	164	165	166	167	168½	169½	170½	172	173

Lengths.	29. MEAN DIAMETERS.									
	29.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
57.0	163	164	165	166½	167½	168½	170	171	172	173½
.1	163½	164½	165½	166½	168	169	170	171	172½	173½
.2	163½	164½	166	167	168	169	170½	171½	172½	174
.3	164	165	166	167½	168½	169½	170½	172	173	174
.4	164	165½	166½	167½	168½	170	171	172	173½	174½
.5	164½	165½	166½	168	169	170	171½	172½	173½	175
.6	164½	166	167	168	169½	170½	171½	172½	174	175
.7	165	166	167½	168½	169½	170½	172	173	174	175½
.8	165½	166½	167½	168½	170	171	172	173½	174½	175½
.9	165½	166½	168	169	170	171½	172½	173½	175	176
58.0	166	167	168	169½	170½	171½	173	174	175	176½
.1	166	167½	168½	169½	170½	172	173	174	175½	176½
.2	166½	167½	168½	170	171	172	173½	174½	175½	177
.3	166½	168	169	170	171½	172½	173½	175	176	177
.4	167	168	169½	170½	171½	173	174	175	176½	177½
.5	167½	168½	169½	171	172	173	174½	175½	176½	178
.6	167½	168½	170	171	172	173½	174½	175½	177	178
.7	168	169	170	171½	172½	173½	175	176	177	178½
.8	168	169½	170½	171½	173	174	175	176½	177½	178½
.9	168½	169½	170½	172	173	174½	175½	176½	178	179
59.0	168½	170	171	172	173½	174½	176	177	178	179½
.1	169	170	171½	172½	173½	175	176	177	178½	179½
.2	169½	170½	171½	173	174	175	176½	177½	178½	180
.3	169½	170½	172	173	174½	175½	176½	178	179	180½
.4	170	171	172	173½	174½	176	177	178	179½	180½
.5	170	171½	172½	173½	175	176	177	178½	179½	181
.6	170½	171½	173	174	175	176½	177½	178½	180	181
.7	170½	172	173	174½	175½	176½	178	179	180½	181½
.8	171	172	173½	174½	175½	177	178	179½	180½	182
.9	171½	172½	173½	175	176	177	178½	179½	181	182
60.0	171½	172½	174	175	176½	177½	178½	180	181	182½
.1	172	173	174	175½	176½	178	179	180	181½	182½
.2	172	173½	174½	175½	177	178	179½	180½	182	183
.3	172½	173½	175	176	177	178½	179½	181	182	183½
.4	172½	174	175	176½	177½	178½	180	181	182½	183½
.5	173	174	175½	176½	178	179	180	181½	182½	184
.6	173½	174½	175½	177	178	179½	180½	181½	183	184
.7	173½	175	176	177	178½	179½	181	182	183½	184½
.8	174	175	176½	177½	178½	180	181	182½	183½	185
.9	174	175½	176½	178	179	180	181½	182½	184	185

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
33.0	101	101½	102½	103	103½	104½	105	105½	106½	107
.1	101½	102	102½	103½	104	104½	105½	106	107	107½
.2	101½	102½	103	103½	104½	105	105½	106½	107	108
.3	102	102½	103½	104	104½	105½	106	106½	107½	108
.4	102	103	103½	104½	105	105½	106½	107	107½	108½
.5	102½	103	104	104½	105½	106	106½	107½	108	109
.6	103	103½	104	105	105½	106½	107	107½	108½	109
.7	103	104	104½	105	106	106½	107½	108	108½	109½
.8	103½	104	105	105½	106	107	107½	108½	109	109½
.9	103½	104½	105	106	106½	107	108	108½	109½	110
34.0	104	104½	105½	106	107	107½	108	109	109½	110½
.1	104½	105	105½	106½	107	108	108½	109½	110	110½
.2	104½	105½	106	107	107½	108	109	109½	110½	111
.3	105	105½	106½	107	108	108½	109	110	110½	111½
.4	105½	106	106½	107½	108	109	109½	110	111	111½
.5	105½	106½	107	107½	108½	109	110	110½	111½	112
.6	106	106½	107½	108	108½	109½	110	111	111½	112½
.7	106	107	107½	108½	109	110	110½	111	112	112½
.8	106½	107	108	108½	109½	110	111	111½	112	113
.9	107	107½	108	109	109½	110½	111	112	112½	113½
35.0	107	108	108½	109½	110	110½	111½	112	113	113½
.1	107½	108	109	109½	110½	111	111½	112½	113	114
.2	107½	108½	109	110	110½	111½	112	113	113½	114½
.3	108	108½	109½	110	111	111½	112½	113	114	114½
.4	108½	109	110	110½	111	112	112½	113½	114	115
.5	108½	109½	110	111	111½	112½	113	114	114½	115
.6	109	109½	110½	111	112	112½	113½	114	115	115½
.7	109	110	110½	111½	112	113	113½	114½	115	116
.8	109½	110½	111	111½	112½	113	114	114½	115½	116
.9	110	110½	111½	112	113	113½	114½	115	116	116½
36.0	110	111	111½	112½	113	114	114½	115½	116	117
.1	110½	111	112	112½	113½	114	115	115½	116½	117
.2	111	111½	112½	113	113½	114½	115	116	117	117½
.3	111	112	112½	113½	114	115	115½	116½	117	118
.4	111½	112	113	113½	114½	115	116	116½	117½	118
.5	111½	112½	113	114	114½	115½	116	117	117½	118½
.6	112	112½	113½	114	115	116	116½	117½	118	119
.7	112½	113	114	114½	115½	116	117	117½	118½	119
.8	112½	113½	114	115	115½	116½	117	118	118½	119½
.9	113	113½	114½	115	116	116½	117½	118	119	120

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	113	114	114½	115½	116½	117	118	118½	119⅓	120
.1	113½	114½	115	116	116½	117½	118	119	119½	120½
.2	114	114½	115½	116	117	117½	118½	119	120	121
.3	114	115	115½	116½	117	118	118½	119½	120½	121
.4	114½	115	116	116½	117½	118½	119	120	120½	121½
.5	114½	115½	116½	117	118	118½	119½	120	121	121½
.6	115	116	116½	117½	118	119	119½	120⅓	121½	122
.7	115½	116	117	117½	118½	119	120	121	121½	122½
.8	115½	116½	117	118	119	119½	120½	121	122	122½
.9	116	116½	117½	118½	119	120	120½	121½	122	123
38.0	116½	117	118	118½	119½	120	121	122	122½	123½
.1	116½	117½	118	119	119½	120½	121½	122	123	123½
.2	117	117½	118½	119	120	121	121½	122½	123	124
.3	117	118	119	119½	120½	121	122	122½	123½	124½
.4	117½	118½	119	120	120½	121½	122½	123	124	124½
.5	118	118½	119½	120	121	122	122½	123½	124	125
.6	118	119	119½	120½	121½	122	123	123½	124½	125½
.7	118½	119	120	121	121½	122½	123	124	125	125½
.8	118½	119½	120½	121	122	122½	123½	124½	125	126
.9	119	120	120½	121½	122	123	124	124½	125½	126½
39.0	119½	120	121	121½	122½	123½	124	125	126	126½
.1	119½	120½	121	122	123	123½	124½	125½	126	127
.2	120	121	121½	122½	123	124	125	125½	126½	127½
.3	120½	121	122	122½	123½	124½	125	126	127	127½
.4	120½	121½	122	123	124	124½	125½	126½	127	128
.5	121	121½	122½	123½	124	125	126	126½	127½	128
.6	121	122	123	123½	124½	125	126	127	127½	128½
.7	121½	122½	123	124	124½	125½	126½	127	128	129
.8	122	122½	123½	124	125	126	126½	127½	128½	129
.9	122	123	123½	124½	125½	126	127	128	128½	129½
40.0	122½	123	124	125	125½	126½	127½	128	129	130
.1	122½	123½	124½	125	126	127	127½	128½	129½	130
.2	123	124	124½	125½	126½	127	128	129	129½	130½
.3	123½	124	125	126	126½	127½	128½	129	130	131
.4	123½	124½	125½	126	127	128	128½	129½	130½	131
.5	124	125	125½	126½	127½	128	129	130	130½	131½
.6	124	125	126	126½	127½	128½	129½	130	131	132
.7	124½	125½	126	127	128	128½	129½	130½	131½	132
.8	125	125½	126½	127½	128	129	130	130½	131½	132½
.9	125	126	127	127½	128½	129½	130	131	132	133

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
41.0	125½	126½	127	128	129	129½	130½	131½	132	133
.1	126	126½	127½	128½	129	130	131	131½	132½	133½
.2	126	127	128	128½	129½	130½	131	132	133	133½
.3	126½	127	128	129	130	130½	131½	132½	133	134
.4	126½	127½	128½	129	130	131	132	132½	133½	134½
.5	127	128	128½	129½	130½	131½	132	133	134	134½
.6	127½	128	129	130	130½	131½	132½	133½	134	135
.7	127½	128½	129½	130	131	132	133	133½	134½	135½
.8	128	129	129½	130½	131½	132	133	134	135	135½
.9	128	129	130	131	131½	132½	133½	134½	135	136
42.0	128½	129½	130	131	132	133	133½	134½	135½	136½
.1	129	129½	130½	131½	132½	133	134	135	136	136½
.2	129	130	131	131½	132½	133½	134½	135	136	137
.3	129½	130½	131	132	133	134	134½	135½	136½	137½
.4	129½	130½	131½	132½	133	134	135	136	137	137½
.5	130	131	132	132½	133½	134½	135½	136	137	138
.6	130½	131	132	133	134	134½	135½	136½	137½	138½
.7	130½	131½	132½	133½	134	135	136	137	137½	138½
.8	131	132	132½	133½	134½	135½	136½	137	138	139
.9	131½	132	133	134	135	135½	136½	137½	138½	139½
43.0	131½	132½	133½	134	135	136	137	138	138½	139½
.1	132	133	133½	134½	135½	136½	137	138	139	140
.2	132	133	134	135	135½	136½	137½	138½	139½	140
.3	132½	133½	134½	135	136	137	138	139	139½	140½
.4	133	133½	134½	135½	136½	137½	138	139	140	141
.5	133	134	135	136	136½	137½	138½	139½	140½	141
.6	133½	134½	135	136	137	138	139	139½	140½	141½
.7	133½	134½	135½	136½	137½	138	139	140	141	142
.8	134	135	136	136½	137½	138½	139½	140½	141½	142
.9	134½	135	136	137	138	139	140	140½	141½	142½
44.0	134½	135½	136½	137½	138½	139	140	141	142	143
.1	135	136	137	137½	138½	139½	140½	141½	142	143
.2	135½	136	137	138	139	140	140½	141½	142½	143½
.3	135½	136½	137½	138½	139	140	141	142	143	144
.4	136	137	137½	138½	139½	140½	141½	142½	143	144
.5	136	137	138	139	140	140½	141½	142½	143½	144½
.6	136½	137½	138½	139	140	141	142	143	144	145
.7	137	137½	138½	139½	140½	141½	142½	143	144	145
.8	137	138	139	140	141	141½	142½	143½	144½	145½
.9	137½	138½	139	140	141	142	143	144	145	146

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
45.0	137½	138½	139½	140½	141½	142½	143½	144	145	146
.1	138	139	140	141	141½	142½	143½	144½	145½	146½
.2	138½	139	140	141	142	143	144	145	146	146½
.3	138½	139½	140½	141½	142½	143½	144	145	146	147
.4	139	140	141	141½	142½	143½	144½	145½	146½	147½
.5	139	140	141	142	143	144	145	146	147	147½
.6	139½	140½	141½	142½	143½	144	145	146	147	148
.7	140	141	141½	142½	143½	144½	145½	146½	147½	148½
.8	140	141	142	143	144	145	146	147	147½	148½
.9	140½	141½	142½	143½	144	145	146	147	148	149
46.0	141	141½	142½	143½	144½	145½	146½	147½	148½	149½
.1	141	142	143	144	145	146	147	147½	148½	149½
.2	141½	142½	143½	144	145	146	147	148	149	150
.3	141½	142½	143½	144½	145½	146½	147½	148½	149½	150½
.4	142	143	144	145	146	147	147½	148½	149½	150½
.5	142½	143	144	145	146	147	148	149	150	151
.6	142½	143½	144½	145½	146½	147½	148½	149½	150½	151½
.7	143	144	145	146	146½	147½	148½	149½	150½	151½
.8	143	144	145	146	147	148	149	150	151	152
.9	143½	144½	145½	146½	147½	148½	149½	150½	151½	152½
47.0	144	145	145½	146½	147½	148½	149½	150½	151½	152½
.1	144	145	146	147	148	149	150	151	152	153
.2	144½	145½	146½	147½	148½	149½	150½	151½	152	153
.3	144½	145½	146½	147½	148½	149½	150½	151½	152½	153½
.4	145	146	147	148	149	150	151	152	153	154
.5	145½	146½	147½	148½	149½	150	151	152	153	154
.6	145½	146½	147½	148½	149½	150½	151½	152½	153½	154½
.7	146	147	148	149	150	151	152	153	154	155
.8	146½	147	148	149	150	151	152	153	154	155
.9	146½	147½	148½	149½	150½	151½	152½	153½	154½	155½
48.0	147	148	149	150	151	152	153	154	155	156
.1	147	148	149	150	151	152	153	154	155	156
.2	147½	148½	149½	150½	151½	152½	153½	154½	155½	156½
.3	148	149	150	151	152	153	154	155	156	157
.4	148	149	150	151	152	153	154	155	156	157
.5	148½	149½	150½	151½	152½	153½	154½	155½	156½	157½
.6	148½	149½	150½	151½	152½	153½	154½	155½	157	158
.7	149	150	151	152	153	154	155	156	157	158
.8	149½	150½	151½	152½	153½	154½	155½	156½	157½	158½
.9	149½	150½	151½	152½	153½	154½	155½	156½	157½	158½

Lengths.	30. MEAN DIAMETERS.									
	30.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
49.0	150	151	152	153	154	155	156	157	158	159
.1	150	151	152½	153½	154½	155½	156½	157½	158½	159½
.2	150½	151½	152½	153½	154½	155½	156½	157½	158½	159½
.3	151	152	153	154	155	156	157	158	159	160
.4	151	152	153	154	155	156	157½	158½	159½	160½
.5	151½	152½	153½	154½	155½	156½	157½	158½	159½	160½
.6	152	153	154	155	156	157	158	159	160	161
.7	152	153	154	155	156	157	158	159½	160½	161½
.8	152½	153½	154½	155½	156½	157½	158½	159½	160½	161½
.9	152½	153½	154½	156	157	158	159	160	161	162
50.0	153	154	155	156	157	158	159	160	161½	162½
.1	153½	154½	155½	156½	157½	158½	159½	160½	161½	162½
.2	153½	154½	155½	156½	157½	159	160	161	162	163
.3	154	155	156	157	158	159	160	161	162	163½
.4	154	155½	156½	157½	158½	159½	160½	161½	162½	163½
.5	154½	155½	156½	157½	158½	159½	161	162	163	164
.6	155	156	157	158	159	160	161	162	163	164½
.7	155	156	157	158½	159½	160½	161½	162½	163½	164½
.8	155½	156½	157½	158½	159½	160½	161½	163	164	165
.9	156	157	158	159	160	161	162	163	164	165
51.0	156	157	158	159	160	161½	162½	163½	164½	165½
.1	156½	157½	158½	159½	160½	161½	162½	163½	165	166
.2	156½	157½	159	160	161	162	163	164	165	166
.3	157	158	159	160	161	162½	163½	164½	165½	166½
.4	157½	158½	159½	160½	161½	162½	163½	164½	166	167
.5	157½	158½	159½	161	162	163	164	165	166	167
.6	158	159	160	161	162	163	164½	165½	166½	167½
.7	158	159½	160½	161½	162½	163½	164½	165½	167	168
.8	158½	159½	160½	161½	163	164	165	166	167	168
.9	159	160	161	162	163	164	165	166½	167½	168½
52.0	159	160	161	162½	163½	164½	165½	166½	167½	169
.1	159½	160½	161½	162½	163½	165	166	167	168	169
.2	159½	161	162	163	164	165	166	167½	168½	169½
.3	160	161	162	163½	164½	165½	166½	167½	168½	170
.4	160½	161½	162½	163½	164½	165½	167	168	169	170
.5	160½	161½	163	164	165	166	167	168	169½	170½
.6	161	162	163	164	165½	166½	167½	168½	169½	171
.7	161½	162½	163½	164½	165½	166½	168	169	170	171
.8	161½	162½	163½	165	166	167	168	169	170½	171½
.9	162	163	164	165	166	167½	168½	169½	170½	171½

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
53.0	162	163½	164½	165½	166½	167½	168½	170	171	172
.1	162½	163½	164½	166	167	168	169	170	171½	172½
.2	163	164	165	166	167	168½	169½	170½	171½	172½
.3	163	164	165½	166½	167½	168½	169½	171	172	173
.4	163½	164½	165½	166½	168	169	170	171	172	173½
.5	163½	165	166	167	168	169	170½	171½	172½	173½
.6	164	165	166	167½	168½	169½	170½	172	173	174
.7	164½	165½	166½	167½	168½	170	171	172	173	174½
.8	164½	165½	167	168	169	170	171½	172½	173½	174½
.9	165	166	167	168	169½	170½	171½	172½	174	175
54.0	165	166½	167½	168½	169½	171	172	173	174	175½
.1	165½	166½	168	169	170	171	172	173½	174½	175½
.2	166	167	168	169	170½	171½	172½	173½	175	176
.3	166	167½	168½	169½	170½	171½	173	174	175	176½
.4	166½	167½	168½	170	171	172	173	174½	175½	176½
.5	167	168	169	170	171	172½	173½	174½	176	177
.6	167	168	169½	170½	171½	172½	174	175	176	177½
.7	167½	168½	169½	170½	172	173	174	175½	176½	177½
.8	167½	169	170	171	172	173½	174½	175½	177	178
.9	168	169	170	171½	172½	173½	175	176	177	178
55.0	168½	169½	170½	171½	173	174	175	176	177½	178½
.1	168½	169½	171	172	173	174½	175½	176½	177½	179
.2	169	170	171	172½	173½	174½	175½	177	178	179
.3	169	170½	171½	172½	174	175	176	177	178½	179½
.4	169½	170½	172	173	174	175	176½	177½	178½	180
.5	170	171	172	173	174½	175½	176½	178	179	180
.6	170	171½	172½	173½	174½	176	177	178	179½	180½
.7	170½	171½	172½	174	175	176	177½	178½	179½	181
.8	170½	172	173	174	175½	176½	177½	179	180	181
.9	171	172	173½	174½	175½	177	178	179	180½	181½
56.0	171½	172½	173½	175	176	177	178½	179½	180½	182
.1	171½	173	174	175	176½	177½	178½	180	181	182
.2	172	173	174½	175½	176½	178	179	180	181½	182½
.3	172½	173½	174½	175½	177	178	179	180½	181½	183
.4	172½	173½	175	176	177	178½	179½	180½	182	183
.5	173	174	175	176½	177½	178½	180	181	182	183½
.6	173	174½	175½	176½	178	179	180	181½	182½	183½
.7	173½	174½	176	177	178	179½	180½	181½	183	184
.8	174	175	176	177½	178½	179½	181	182	183	184½
.9	174	175½	176½	177½	179	180	181	182½	183½	184½

Lengths.	30. MEAN DIAMETERS.									
	30.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
57.0	174½	175½	177	178	179	180½	181½	182½	184	185
.1	174½	176	177	178	179½	180½	182	183	184	185½
.2	175	176	177½	178½	179½	181	182	183½	184½	185½
.3	175½	176½	177½	179	180	181	182½	183½	185	186
.4	175½	177	178	179	180½	181½	182½	184	185	186½
.5	176	177	178½	179½	180½	182	183	184½	185½	186½
.6	176½	177½	178½	180	181	182	183½	184½	186	187
.7	176½	177½	179	180	181½	182½	183½	185	186	187½
.8	177	178	179	180½	181½	183	184	185	186½	187½
.9	177	178½	179½	180½	182	183	184½	185½	186½	188
58.0	177½	178½	180	181	182	183½	184½	186	187	188½
.1	178	179	180	181½	182½	184	185	186	187½	188½
.2	178	179½	180½	181½	183	184	185½	186½	187½	189
.3	178½	179½	181	182	183	184½	185½	187	188	189½
.4	178½	180	181	182½	183½	184½	186	187	188½	189½
.5	179	180	181½	182½	184	185	186	187½	188½	190
.6	179½	180½	181½	183	184	185½	186½	188	189	190
.7	179½	181	182	183	184½	185½	187	188	189½	190½
.8	180	181	182½	183½	185	186	187	188½	189½	191
.9	180	181½	182½	184	185	186½	187½	188½	190	191
59.0	180½	181½	183	184	185½	186½	188	189	190½	191½
.1	181	182	183½	184½	185½	187	188	189½	190½	192
.2	181	182½	183½	185	186	187	188½	189½	191	192
.3	181½	182½	184	185	186½	187½	189	190	191½	192½
.4	182	183	184	185½	186½	188	189	190½	191½	193
.5	182	183½	184½	185½	187	188	189½	190½	192	193
.6	182½	183½	185	186	187½	188½	189½	191	192	193½
.7	182½	184	185	186½	187½	189	190	191½	192½	194
.8	183	184	185½	186½	188	189	190½	191½	193	194
.9	183½	184½	185½	187	188	189½	190½	192	193	194½
60.0	183½	185	186	187½	188½	190	191	192½	193½	195
.1	184	185	186½	187½	189	190	191½	192½	194	195
.2	184	185½	186½	188	189	190½	191½	193	194	195½
.3	184½	186	187	188	189½	190½	192	193	194½	196
.4	185	186	187½	188½	190	191	192½	193½	195	196
.5	185	186½	187½	189	190	191½	192½	194	195	196½
.6	185½	186½	188	189	190½	191½	193	194	195½	196½
.7	185½	187	188	189½	190½	192	193	194½	196	197
.8	186	187½	188½	190	191	192½	193½	195	196	197½
.9	186½	187½	189	190	191½	192½	194	195	196½	197½

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
34.0	111	112	112½	113½	114	114½	115½	116	117	117½
.1	111½	112	113	113½	114½	115	116	116½	117	118
.2	111½	112½	113	114	114½	115½	116	117	117½	118½
.3	112	113	113½	114½	115	115½	116½	117	118	118½
.4	112½	113	114	114½	115½	116	117	117½	118½	119
.5	112½	113½	114	115	115½	116½	117	118	118½	119½
.6	113	114	114½	115½	116	116½	117½	118	119	119½
.7	113½	114	115	115½	116½	117	118	118½	119½	120
.8	113½	114½	115	116	116½	117½	118	119	119½	120½
.9	114	115	115½	116½	117	117½	118½	119	120	120½
35.0	114½	115	116	116½	117½	118	119	119½	120½	121
.1	114½	115½	116	117	117½	118½	119	120	120½	121½
.2	115	116	116½	117	118	119	119½	120½	121	122
.3	115½	116	117	117½	118½	119	120	120½	121½	122
.4	115½	116½	117	118	118½	119½	120	121	121½	122½
.5	116	116½	117½	118	119	120	120½	121½	122	123
.6	116½	117	118	118½	119½	120	121	121½	122½	123
.7	116½	117½	118	119	119½	120½	121	122	122½	123½
.8	117	117½	118½	119	120	121	121½	122½	123	124
.9	117½	118	119	119½	120½	121	122	122½	123½	124
36.0	117½	118½	119	120	120½	121½	122	123	124	124½
.1	118	118½	119½	120	121	122	122½	123½	124	125
.2	118½	119	120	120½	121½	122	123	123½	124½	125
.3	118½	119½	120	121	121½	122½	123	124	125	125½
.4	119	119½	120½	121	122	123	123½	124½	125	126
.5	119½	120	121	121½	122½	123	124	124½	125½	126½
.6	119½	120½	121	122	122½	123½	124½	125	126	126½
.7	120	120½	121½	122	123	124	124½	125½	126	127
.8	120	121	122	122½	123½	124	125	125½	126½	127½
.9	120½	121½	122	123	123½	124½	125½	126	127	127½
37.0	121	121½	122½	123	124	125	125½	126½	127	128
.1	121	122	123	123½	124½	125	126	127	127½	128½
.2	121½	122½	123	124	124½	125½	126½	127	128	128½
.3	122	122½	123½	124	125	126	126½	127½	128	129
.4	122	123	124	124½	125½	126	127	128	128½	129½
.5	122½	123½	124	125	125½	126½	127½	128	129	129½
.6	123	123½	124½	125	126	127	127½	128½	129½	130
.7	123	124	125	125½	126½	127	128	129	129½	130½
.8	123½	124½	125	126	126½	127½	128½	129	130	131
.9	124	124½	125½	126	127	128	128½	129½	130½	131

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
38.0	124	125	126	126½	127½	128	129	130	130½	131½
.1	124½	125½	126	127	127½	128½	129½	130	131	132
.2	125	125½	126½	127	128	129	129½	130½	131½	132
.3	125	126	127	127½	128½	129	130	131	131½	132½
.4	125½	126½	127	128	128½	129½	130½	131	132	133
.5	126	126½	127½	128	129	130	130½	131½	132½	133
.6	126	127	128	128½	129½	130	131	132	132½	133½
.7	126½	127½	128	129	129½	130½	131½	132	133	134
.8	127	127½	128½	129	130	131	131½	132½	133½	134
.9	127	128	128½	129½	130½	131	132	133	133½	134½
39.0	127½	128½	129	130	130½	131½	132½	133	134	135
.1	128	128½	129½	130	131	132	132½	133½	134½	135½
.2	128	129	129½	130½	131½	132	133	134	135	135½
.3	128½	129	130	131	131½	132½	133½	134½	135	136
.4	128½	129½	130½	131	132	133	134	134½	135½	136½
.5	129	130	130½	131½	132½	133½	134	135	136	136½
.6	129½	130	131	132	132½	133½	134½	135½	136	137
.7	129½	130½	131½	132	133	134	135	135½	136½	137½
.8	130	131	131½	132½	133½	134½	135	136	137	137½
.9	130½	131	132	133	134	134½	135½	136½	137	138
40.0	130½	131½	132½	133	134	135	136	136½	137½	138½
.1	131	132	132½	133½	134½	135½	136	137	138	138½
.2	131½	132	133	134	135	135½	136½	137½	138	139
.3	131½	132½	133½	134	135	136	137	137½	138½	139½
.4	132	133	133½	134½	135½	136½	137	138	139	140
.5	132½	133	134	135	136	136½	137½	138½	139	140
.6	132½	133½	134½	135	136	137	138	138½	139½	140½
.7	133	134	134½	135½	136½	137½	138	139	140	141
.8	133½	134	135	136	137	137½	138½	139½	140½	141
.9	133½	134½	135½	136	137	138	139	139½	140½	141½
41.0	134	135	135½	136½	137½	138½	139	140	141	142
.1	134½	135	136	137	138	138½	139½	140½	141½	142
.2	134½	135½	136½	137	138	139	140	141	141½	142½
.3	135	136	136½	137½	138½	139½	140	141	142	143
.4	135½	136	137	138	139	139½	140½	141½	142½	143
.5	135½	136½	137½	138	139	140	141	142	142½	143½
.6	136	137	137½	138½	139½	140½	141	142	143	144
.7	136½	137	138	139	140	140½	141½	142½	143½	144½
.8	136½	137½	138½	139	140	141	142	143	143½	144½
.9	137	138	138½	139½	140½	141½	142½	143	144	145

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
42.0	137	138	139	140	141	141½	142½	143½	144½	145½
.1	137½	138½	139½	140	141	142	143	144	144½	145½
.2	138	139	139½	140½	141½	142½	143½	144	145	146
.3	138	139	140	141	142	142½	143½	144½	145½	146½
.4	138½	139½	140½	141	142	143	144	145	146	146½
.5	139	140	140½	141½	142½	143½	144½	145	146	147
.6	139	140	141	142	143	143½	144½	145½	146½	147½
.7	139½	140½	141½	142	143	144	145	146	147	147½
.8	140	140½	141½	142½	143½	144½	145½	146	147	148
.9	140	141	142	143	144	144½	145½	146½	147½	148½
43.0	140½	141½	142½	143	144	145	146	147	148	149
.1	141	141½	142½	143½	144½	145½	146½	147½	148	149
.2	141	142	143	144	145	145½	146½	147½	148½	149½
.3	141½	142½	143½	144	145	146	147	148	149	150
.4	142	142½	143½	144½	145½	146½	147½	148½	149	150
.5	142	143	144	145	146	147	147½	148½	149½	150½
.6	142½	143½	144½	145	146	147	148	149	150	151
.7	143	143½	144½	145½	146½	147½	148½	149½	150½	151
.8	143	144	145	146	147	148	148½	149½	150½	151½
.9	143½	144½	145½	146	147	148	149	150	151	152
44.0	144	144½	145½	146½	147½	148½	149½	150½	151½	152
.1	144	145	146	147	148	149	149½	150½	151½	152½
.2	144½	145½	146½	147	148	149	150	151	152	153
.3	141½	145½	146½	147½	148½	149½	150½	151½	152½	153½
.4	145	146	147	148	149	150	150½	151½	152½	153½
.5	145½	146½	147½	148	149	150	151	152	153	154
.6	145½	146½	147½	148½	149½	150½	151½	152½	153½	154½
.7	146	147	148	149	150	151	152	152½	153½	154½
.8	146½	147½	148½	149	150	151	152	153	154	155
.9	146½	147½	148½	149½	150½	151½	152½	153½	154½	155½
45.0	147	148	149	150	151	152	153	153½	154½	155½
.1	147½	148½	149½	150	151	152	153	154	155	156
.2	147½	148½	149½	150½	151½	152½	153½	154½	155½	156½
.3	148	149	150	151	152	153	154	155	156	156½
.4	148½	149½	150½	151	152	153	154	155	156	157
.5	148½	149½	150½	151½	152½	153½	154½	155½	156½	157½
.6	149	150	151	152	153	154	155	156	157	158
.7	149½	150½	151½	152	153	154	155	156	157	158
.8	149½	150½	151½	152½	153½	154½	155½	156½	157½	158½
.9	150	151	152	153	154	155	156	157	158	159

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
46.0	150½	151½	152	153	154	155	156	157	158	159
.1	150½	151½	152½	153½	154½	155½	156½	157½	158½	159½
.2	151	152	153	154	155	156	157	158	159	160
.3	151½	152½	153	154	155	156	157	158	159	160
.4	151½	152½	153½	154½	155½	156½	157½	158½	159½	160½
.5	152	153	154	155	156	157	158	159	160	161
.6	152½	153	154	155	156	157	158	159	160	161
.7	152½	153½	154½	155½	156½	157½	158½	159½	160½	161½
.8	153	154	155	156	157	158	159	160	161	162
.9	153	154	155	156	157	158	159	160	161½	162½
47.0	153½	154½	155½	156½	157½	158½	159½	160½	161½	162½
.1	154	155	156	157	158	159	160	161	162	163
.2	154	155	156	157	158	159	160	161½	162½	163½
.3	154½	155½	156½	157½	158½	159½	160½	161½	162½	163½
.4	155	156	157	158	159	160	161	162	163	164
.5	155	156	157	158	159	160	161½	162½	163½	164½
.6	155½	156½	157½	158½	159½	160½	161½	162½	163½	164½
.7	156	157	158	159	160	161	162	163	164	165
.8	156	157	158	159	160	161½	162½	163½	164½	165½
.9	156½	157½	158½	159½	160½	161½	162½	163½	164½	165½
48.0	157	158	159	160	161	162	163	164	165	166
.1	157	158	159	160	161	162½	163½	164½	165½	166½
.2	157½	158½	159½	160½	161½	162½	163½	164½	165½	167
.3	158	159	160	161	162	163	164	165	166	167
.4	158	159	160	161	162	163½	164½	165½	166½	167½
.5	158½	159½	160½	161½	162½	163½	164½	165½	167	168
.6	159	160	161	162	163	164	165	166	167	168
.7	159	160	161	162	163½	164½	165½	166½	167½	168½
.8	159½	160½	161½	162½	163½	164½	165½	166½	168	169
.9	160	161	162	163	164	165	166	167	168	169
49.0	160	161	162	163	164½	165½	166½	167½	168½	169½
.1	160½	161½	162½	163½	164½	165½	166½	168	169	170
.2	161	162	163	164	165	166	167	168	169	170
.3	161	162	163	164	165½	166½	167½	168½	169½	170½
.4	161½	162½	163½	164½	165½	166½	167½	169	170	171
.5	161½	163	164	165	166	167	168	169	170	171½
.6	162	163	164	165	166½	167½	168½	169½	170½	171½
.7	162½	163½	164½	165½	166½	167½	168½	170	171	172
.8	162½	164	165	166	167	168	169	170	171	172½
.9	163	164	165	166	167½	168½	169½	170½	171½	172½

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
50.0	163½	164½	165½	166½	167½	168½	170	171	172	173
.1	163½	165	166	167	168	169	170	171	172½	173½
.2	164	165	166	167	168½	169½	170½	171½	172½	173½
.3	164½	165½	166½	167½	168½	169½	171	172	173	174
.4	164½	165½	167	168	169	170	171	172	173½	174½
.5	165	166	167	168	169½	170½	171½	172½	173½	174½
.6	165½	166½	167½	168½	169½	170½	172	173	174	175
.7	165½	166½	168	169	170	171	172	173	174½	175½
.8	166	167	168	169	170½	171½	172½	173½	174½	176
.9	166½	167½	168½	169½	170½	171½	173	174	175	176
51.0	166½	167½	169	170	171	172	173	174	175½	176½
.1	167	168	169	170	171½	172½	173½	174½	175½	177
.2	167½	168½	169½	170½	171½	172½	174	175	176	177
.3	167½	168½	170	171	172	173	174	175½	176½	177½
.4	168	169	170	171	172½	173½	174½	175½	176½	178
.5	168½	169½	170½	171½	172½	173½	175	176	177	178
.6	168½	169½	171	172	173	174	175	176½	177½	178½
.7	169	170	171	172	173½	174½	175½	176½	178	179
.8	169½	170½	171½	172½	173½	175	176	177	178	179
.9	169½	170½	172	173	174	175	176	177½	178½	179½
52.0	170	171	172	173	174½	175½	176½	177½	179	180
.1	170	171½	172½	173½	174½	176	177	178	179	180½
.2	170½	171½	173	174	175	176	177	178½	179½	180½
.3	171	172	173	174	175½	176½	177½	178½	180	181
.4	171	172½	173½	174½	175½	177	178	179	180	181½
.5	171½	172½	174	175	176	177	178	179½	180½	181½
.6	172	173	174	175	176½	177½	178½	179½	181	182
.7	172	173½	174½	175½	176½	178	179	180	181	182½
.8	172½	173½	175	176	177	178	179½	180½	181½	182½
.9	173	174	175	176	177½	178½	179½	180½	182	183
53.0	173	174½	175½	176½	177½	179	180	181	182	183½
.1	173½	174½	175½	177	178	179	180½	181½	182½	183½
.2	174	175	176	177	178½	179½	180½	182	183	184
.3	174	175½	176½	177½	178½	180	181	182	183½	184½
.4	174½	175½	176½	178	179	180	181½	182½	183½	185
.5	175	176	177	178	179½	180½	181½	183	184	185
.6	175	176½	177½	178½	179½	181	182	183	184½	185½
.7	175½	176½	177½	179	180	181	182½	183½	184½	186
.8	176	177	178	179	180½	181½	182½	184	185	186
.9	176	177½	178½	179½	180½	182	183	184	185½	186½

Lengths.	31. MEAN DIAMETERS.									
	31.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
54.0	176½	177½	178½	180	181	182	183½	184½	185½	187
.1	177	178	179	180	181½	182½	183½	185	186	187
.2	177	178	179½	180½	181½	183	184	185	186½	187½
.3	177½	178½	179½	181	182	183	184½	185½	186½	188
.4	177½	179	180	181	182½	183½	184½	186	187	188
.5	178	179	180½	181½	182½	184	185	186	187½	188½
.6	178½	179½	180½	182	183	184	185½	186½	187½	189
.7	178½	180	181	182	183½	184½	185½	187	188	189½
.8	179	180	181½	182½	183½	185	186	187	188½	189½
.9	179½	180½	181½	183	184	185	186½	187½	189	190
55.0	179½	181	182	183	184½	185½	186½	188	189	190½
.1	180	181	182½	183½	184½	186	187	188½	189½	190½
.2	180½	181½	182½	184	185	186	187½	188½	190	191
.3	180½	182	183	184	185½	186½	187½	189	190	191½
.4	181	182	183½	184½	185½	187	188	189½	190½	191½
.5	181½	182½	183½	185	186	187	188½	189½	191	192
.6	181½	183	184	185	186½	187½	189	190	191	192½
.7	182	183	184½	185½	186½	188	189	190½	191½	192½
.8	182½	183½	184½	186	187	188	189½	190½	192	193
.9	182½	184	185	186	187½	188½	190	191	192	193½
56.0	183	184	185½	186½	187½	189	190	191½	192½	194
.1	183½	184½	185½	187	188	189½	190½	191½	193	194
.2	183½	185	186	187	188½	189½	191	192	193	194½
.3	184	185	186½	187½	188½	190	191	192½	193½	195
.4	184½	185½	186½	188	189	190½	191½	192½	194	195
.5	184½	186	187	188	189½	190½	192	193	194½	195½
.6	185	186	187½	188½	189½	191	192	193½	194½	196
.7	185½	186½	187½	189	190	191½	192½	193½	195	196
.8	185½	187	188	189	190½	191½	193	194	195½	196½
.9	186	187	188½	189½	190½	192	193	194½	195½	197
57.0	186	187½	188½	190	191	192½	193½	194½	196	197
.1	186½	188	189	190	191½	192½	194	195	196½	197½
.2	187	188	189½	190½	191½	193	194	195½	196½	198
.3	187	188½	189½	191	192	193½	194½	196	197	198½
.4	187½	189	190	191	192½	193½	195	196	197½	198½
.5	188	189	190½	191½	193	194	195	196½	197½	199
.6	188	189½	190½	192	193	194½	195½	197	198	199½
.7	188½	189½	191	192	193½	194½	196	197	198½	199½
.8	189	190	191½	192½	194	195	196	197½	198½	200
.9	189	190½	191½	193	194	195½	196½	198	199	200½

Lengths.	31. MEAN DIAMETERS.									
	31.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
58.0	189½	190½	192	193	194½	195½	197	198	199½	200½
.1	190	191	192½	193½	195	196	197½	198½	200	201
.2	190	191½	192½	194	195	196½	197½	199	200	201½
.3	190½	191½	193	194	195½	196½	198	199	200½	201½
.4	191	192	193½	194½	196	197	198½	199½	201	202
.5	191	192½	193½	195	196	197½	198½	200	201	202½
.6	191½	192½	194	195	196½	197½	199	200	201½	202½
.7	192	193	194½	195½	197	198	199½	200½	202	203
.8	192	193½	194½	196	197	198½	199½	201	202	203½
.9	192½	193½	195	196	197½	198½	200	201	202½	204
59.0	193	194	195½	196½	198	199	200½	201½	203	204
.1	193	194½	195½	197	198	199½	200½	202	203	204½
.2	193½	194½	196	197	198½	199½	201	202½	203½	205
.3	194	195	196½	197½	199	200	201½	202½	204	205
.4	194	195½	196½	198	199	200½	201½	203	204	205½
.5	194½	195½	197	198	199½	200½	202	203½	204½	206
.6	194½	196	197½	198½	200	201	202½	203½	205	206
.7	195	196½	197½	199	200	201½	202½	204	205½	206½
.8	195½	196½	198	199	200½	201½	203	204½	205½	207
.9	195½	197	198½	199½	201	202	203½	204½	206	207
60.0	196	197½	198½	200	201	202½	203½	205	206½	207½
.1	196½	197½	199	200	201½	203	204	205½	206½	208
.2	196½	198	199½	200½	202	203	204½	205½	207	208½
.3	197	198½	199½	201	202	203½	204½	206	207½	208½
.4	197½	198½	200	201	202½	204	205	206½	207½	209
.5	197½	199	200	201½	203	204	205½	206½	208	209½
.6	198	199½	200½	202	203	204½	205½	207	208½	209½
.7	198½	199½	201	202	203½	205	206	207½	208½	210
.8	198½	200	201	202½	204	205	206½	207½	209	210½
.9	199	200½	201½	203	204	205½	207	208	209½	210½

Lengths.	32. MEAN DIAMETERS.									
	32.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
35.0	122	122½	123½	124	125	125½	126½	127	128	129
.1	122	123	123½	124½	125½	126	127	127½	128½	129
.2	122½	123½	124	125	125½	126½	127	128	129	129½
.3	123	123½	124½	125	126	127	127½	128½	129	130
.4	123	124	125	125½	126½	127	128	128½	129½	130½
.5	123½	124½	125	126	126½	127½	128½	129	130	130½
.6	124	124½	125½	126½	127	128	128½	129½	130	131
.7	124½	125	126	126½	127½	128	129	130	130½	131½
.8	124½	125½	126	127	128	128½	129½	130	131	132
.9	125	126	126½	127½	128	129	129½	130½	131½	132

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
36.0	125½	126	127	127½	128½	129½	130	131	131½	132½
.1	125½	126½	127½	128	129	129½	130½	131	132	133
.2	126	127	127½	128½	129	130	131	131½	132½	133
.3	126½	127	128	129	129½	130½	131	132	133	133½
.4	126½	127½	128½	129	130	130½	131½	132½	133	134
.5	127	128	128½	129½	130½	131	132	132½	133½	134½
.6	127½	128	129	130	130½	131½	132	133	134	134½
.7	128	128½	129½	130	131	132	132½	133½	134	135
.8	128	129	129½	130½	131½	132	133	134	134½	135½
.9	128½	129½	130	131	131½	132½	133½	134	135	136
37.0	129	129½	130½	131	132	133	133½	134½	135½	136
.1	129	130	131	131½	132½	133	134	135	135½	136½
.2	129½	130½	131	132	133	133½	134½	135	136	137
.3	130	130½	131½	132½	133	134	135	135½	136½	137½
.4	130	131	132	132½	133½	134½	135	136	137	137½
.5	130½	131½	132	133	134	134½	135½	136½	137	138
.6	131	131½	132½	133½	134	135	136	136½	137½	138½
.7	131½	132	133	133½	134½	135½	136	137	138	138½
.8	131½	132½	133½	134	135	135½	136½	137½	138½	139
.9	132	133	133½	134½	135½	136	137	138	138½	139½
38.0	132½	133	134	135	135½	136½	137½	138	139	140
.1	132½	133½	134½	135	136	137	137½	138½	139½	140
.2	133	134	134½	135½	136½	137	138	139	139½	140½
.3	133½	134	135	136	136½	137½	138½	139	140	141
.4	133½	134½	135½	136	137	138	139	139½	140½	141½
.5	134	135	135½	136½	137½	138½	139	140	141	141½
.6	134½	135	136	137	138	138½	139½	140½	141	142
.7	134½	135½	136½	137½	138	139	140	140½	141½	142½
.8	135	136	137	137½	138½	139½	140	141	142	143
.9	135½	136½	137	138	139	139½	140½	141½	142½	143
39.0	136	136½	137½	138½	139	140	141	142	142½	143½
.1	136	137	138	138½	139½	140½	141½	142	143	144
.2	136½	137½	138	139	140	141	141½	142½	143½	144½
.3	137	137½	138½	139½	140½	141	142	143	144	144½
.4	137	138	139	140	140½	141½	142½	143	144	145
.5	137½	138½	139	140	141	142	142½	143½	144½	145½
.6	138	138½	139½	140½	141½	142	143	144	145	145½
.7	138	139	140	141	141½	142½	143½	144½	145	146
.8	138½	139½	140½	141	142	143	144	144½	145½	146½
.9	139	140	140½	141½	142½	143½	144	145	146	147

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
40.0	139½	140	141	142	143	143½	144½	145½	146½	147
.1	139½	140½	141½	142	143	144	145	146	146½	147½
.2	140	141	141½	142½	143½	144½	145½	146	147	148
.3	140½	141	142	143	144	144½	145½	146½	147½	148½
.4	140½	141½	142½	143½	144	145	146	147	148	148½
.5	141	142	143	143½	144½	145½	146½	147	148	149
.6	141½	142	143	144	145	146	146½	147½	148½	149½
.7	141½	142½	143½	144½	145½	146	147	148	149	150
.8	142	143	144	144½	145½	146½	147½	148½	149	150
.9	142½	143½	144	145	146	147	148	148½	149½	150½
41.0	142½	143½	144½	145½	146½	147	148	149	150	151
.1	143	144	145	146	146½	147½	148½	149½	150½	151½
.2	143½	144½	145	146	147	148	149	150	150½	151½
.3	144	144½	145½	146½	147½	148½	149	150	151	152
.4	144	145	146	147	148	148½	149½	150½	151½	152½
.5	144½	145½	146½	147	148	149	150	151	152	152½
.6	145	145½	146½	147½	148½	149½	150½	151	152	153
.7	145	146	147	148	149	150	150½	151½	152½	153½
.8	145½	146½	147½	148½	149	150	151	152	153	154
.9	146	147	147½	148½	149½	150½	151½	152½	153½	154
42.0	146	147	148	149	150	151	152	152½	153½	154½
.1	146½	147½	148½	149½	150½	151	152	153	154	155
.2	147	148	149	149½	150½	151½	152½	153½	154½	155½
.3	147½	148	149	150	151	152	153	154	154½	155½
.4	147½	148½	149½	150½	151½	152½	153	154	155	156
.5	148	149	150	151	151½	152½	153½	154½	155½	156½
.6	148½	149	150	151	152	153	154	155	156	157
.7	148½	149½	150½	151½	152½	153½	154½	155	156	157
.8	149	150	151	152	153	153½	154½	155½	156½	157½
.9	149½	150½	151	152	153	154	155	156	157	158
43.0	149½	150½	151½	152½	153½	154½	155½	156½	157½	158
.1	150	151	152	153	154	155	155½	156½	157½	158½
.2	150½	151½	152½	153	154	155	156	157	158	159
.3	151	151½	152½	153½	154½	155½	156½	157½	158½	159½
.4	151	152	153	154	155	156	157	158	159	159½
.5	151½	152½	153½	154½	155½	156	157	158	159	160
.6	152	152½	153½	154½	155½	156½	157½	158½	159½	160½
.7	152	153	154	155	156	157	158	159	160	161
.8	152½	153½	154½	155½	156½	157½	158½	159	160	161
.9	153	154	155	155½	156½	157½	158½	159½	160½	161½

Lengths.	32. MEAN DIAMETERS.									
	32.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
44.0	153	154	155	156	157	158	159	160	161	162
.1	153½	154½	155½	156½	157½	158½	159½	160½	161½	162½
.2	154	155	156	157	158	158½	159½	160½	161½	162½
.3	154	155	156	157	158	159	160	161	162	163
.4	154½	155½	156½	157½	158½	159½	160½	161½	162½	163½
.5	155	156	157	158	159	160	161	162	163	164
.6	155½	156½	157	158	159	160	161	162	163	164
.7	155½	156½	157½	158½	159½	160½	161½	162½	163½	164½
.8	156	157	158	159	160	161	162	163	164	165
.9	156½	157½	158½	159½	160½	161	162	163	164	165
45.0	[illegible]	157½	158½	159½	160½	161½	162½	163½	164½	165½
.1	[illegible]	158	159	160	161	162	163	164	165	166
.2	[illegible]	158½	159½	160½	161½	162½	163½	164½	165½	166½
.3	[illegible]	158½	159½	160½	161½	162½	163½	164½	165½	166½
.4	[illegible]	[illegible]	160	161	162	163	164	165	166	167
.5	[illegible]	159½	160½	161½	162½	163½	164½	165½	166½	167½
.6	159	160	161	162	163	164	165	166	167	168
.7	159	160	161	162	163	164	165	166	167	168
.8	159½	160½	161½	162½	163½	164½	165½	166½	167½	168½
.9	160	161	162	163	164	165	166	167	168	169
46.0	160	161	162	163	164	165	166	167	168½	169½
.1	160½	161½	162½	163½	164½	165½	166½	167½	168½	169½
.2	161	162	163	164	165	166	167	168	169	170
.3	161	162	163	164	165½	166½	167½	168½	169½	170½
.4	161½	162½	163½	164½	165½	166½	167½	168½	169½	171
.5	162	163	164	165	166	167	168	169	170	171
.6	162	163½	164½	165½	166½	167½	168½	169½	170½	171½
.7	162½	163½	164½	165½	166½	167½	168½	170	171	172
.8	163	164	165	166	167	168	169	170	171	172
.9	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
47.0	163½	164½	165½	166½	168	169	170	171	172	173
.1	164	165	166	167	168	169	170	171	172½	173½
.2	164½	165½	166½	167½	168½	169½	170½	171½	172½	173½
.3	164½	165½	166½	168	169	170	171	172	173	174
.4	165	166	167	168	169	170	171½	172½	173½	174½
.5	165½	166½	167½	168½	169½	170½	171½	172½	173½	175
.6	165½	167	168	169	170	171	172	173	174	175
.7	166	167	168	169	170½	171½	172½	173½	174½	175½
.8	166½	167½	168½	169½	170½	171½	172½	174	175	176
.9	167	168	169	170	171	172	173	174	175	176½

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
48.0	167	168	169	170½	171½	172½	173½	174½	175½	176½
.1	167½	168½	169½	170½	171½	172½	174	175	176	177
.2	168	169	170	171	172	173	174	175	176½	177½
.3	168	169	170½	171½	172½	173½	174½	175½	176½	178
.4	168½	169½	170½	171½	172½	174	175	176	177	178
.5	169	170	171	172	173	174	175	176½	177½	178½
.6	169	170½	171½	172½	173½	174½	175½	176½	178	179
.7	169½	170½	171½	172½	174	175	176	177	178	179
.8	170	171	172	173	174	175½	176½	177½	178½	179½
.9	170½	171½	172½	173	174½	175½	176½	178	179	180
49.0	170½	171½	172½	174	175	176	177	178	179	180½
.1	171	172	173	174	175	176½	177½	178½	179½	180½
.2	171½	172½	173½	174½	175½	176½	178	179	180	181
.3	171½	172½	174	175	176	177	178	179	180½	181½
.4	172	173	174	175	176½	177½	178½	179½	180½	182
.5	172½	173½	174½	175½	176½	178	179	180	181	182
.6	172½	174	175	176	177	178	179	180½	181½	182½
.7	173	174	175	176½	177½	178½	179½	180½	182	183
.8	173½	174½	175½	176½	177½	179	180	181	182	183½
.9	173½	175	176	177	178	179	180½	181½	182½	183½
50.0	174	175	176½	177½	178½	179½	180½	182	183	184
.1	174½	175½	176½	177½	179	180	181	182	183½	184½
.2	175	176	177	178	179	180½	181½	182½	183½	184½
.3	175	176	177½	178½	179½	180½	182	183	184	185
.4	175½	176½	177½	179	180	181	182	183	184½	185½
.5	176	177	178	179	180	181½	182½	183½	184½	186
.6	176	177½	178½	179½	180½	181½	183	184	185	186
.7	176½	177½	178½	180	181	182	183	184½	185½	186½
.8	177	178	179	180	181½	182½	183½	184½	186	187
.9	177	178½	179½	180½	181½	183	184	185	186	187½
51.0	177½	178½	180	181	182	183	184½	185½	186½	187½
.1	178	179	180	181½	182½	183½	184½	186	187	188
.2	178½	179½	180½	181½	182½	184	185	186	187½	188½
.3	178½	179½	181	182	183	184	185½	186½	187½	188½
.4	179	180	181	182½	183½	184½	185½	187	188	189
.5	179½	180½	181½	182½	184	185	186	187	188½	189½
.6	179½	181	182	183	184	185½	186½	187½	188½	190
.7	180	181	182½	183½	184½	185½	187	188	189	190½
.8	180½	181½	182½	183½	185	186	187	188½	189½	190½
.9	180½	182	183	184	185	186½	187½	188½	190	191

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
52.0	181	182	183½	184½	185½	186½	188	189	190	191½
.1	181½	182½	183½	185	186	187	188½	189½	190½	191½
.2	181½	183	184	185	186½	187½	188½	190	191	192
.3	182	183	184½	185½	186½	188	189	190	101½	192½
.4	182½	183½	184½	186	187	188	189½	190½	191½	193
.5	183	184	185	186	187½	188½	189½	191	192	193
.6	183	184½	185½	186½	187½	189	190	191	192½	193½
.7	183½	184½	186	187	188	189½	190½	191½	193	194
.8	184	185	186	187½	188½	189½	191	192	193	194½
.9	184	185½	186½	187½	189	190	191	192½	193½	194½
53.0	184½	185½	187	188	189	190½	191½	192½	194	195
.1	185	186	187	188½	189½	190½	192	193	194	195½
.2	185	186½	187½	188½	190	191	192	193½	194½	196
.3	185½	186½	188	189	190	191½	192½	194	195	196
.4	186	187	188	189½	190½	192	193	194	195½	196½
.5	186½	187½	188½	190	191	192	193½	194½	195½	197
.6	186½	188	189	190	191½	192½	193½	195	196	197½
.7	187	188	189½	190½	191½	193	194	195	196½	197½
.8	187½	188½	189½	191	192	193	194½	195½	197	198
.9	187½	189	190	101	192½	193½	195	196	197	198½
54.0	188	189	190½	191½	192½	194	195	196½	197½	198½
.1	188½	189½	190½	192	193	194½	195½	196½	198	199
.2	188½	190	191	192½	193½	194½	196	197	198½	199½
.3	189	190	191½	192½	194	195	196	197½	198½	200
.4	189½	190½	192	193	194	195½	196½	198	199	200
.5	189½	191	192	193½	194½	195½	197	198	199½	200½
.6	190	191½	192½	193½	195	196	197½	198½	199½	201
.7	190½	191½	193	194	195	196½	197½	199	200	201½
.8	191	192	193	194½	195½	197	198	199	200½	201½
.9	191	192½	193½	194½	196	197	198½	199½	201	202
55.0	191½	192½	194	195	196½	197½	198½	200	201	202½
.1	192	193	194	195½	196½	198	199	200½	201½	203
.2	192	193½	194½	196	197	198	199½	200½	202	203
.3	192½	193½	195	196	197½	198½	200	201	202½	203½
.4	193	194	195½	196½	197½	199	200	201½	202½	204
.5	193	194½	195½	197	198	199½	200½	202	203	204½
.6	193½	195	196	197	198½	199½	201	202	203½	204½
.7	194	195	196½	197½	199	200	201½	202½	203½	205
.8	194½	195½	196½	198	199	200½	201½	203	204	205½
.9	194½	196	197	198½	199½	201	202	203	204½	205½

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
56.0	195	196	197½	198½	200	201	202½	203½	205	206
.1	195½	196½	198	199	200	201½	202½	204	205	206½
.2	195½	197	198	199½	200½	202	203	204½	205½	207
.3	196	197	198½	199½	201	202	203½	204½	206	207
.4	196½	197½	199	200	201½	202½	204	205	206½	207½
.5	196½	198	199	200½	201½	203	204	205½	206½	208
.6	197	198½	199½	201	202	203½	204½	206	207	208½
.7	197½	198½	200	201	202½	203½	205	206	207½	208½
.8	198	199	200	201½	202½	204	205	206½	208	209
.9	198	199½	200½	202	203	204½	205½	207	208	209½
57.0	198½	199½	201	202	203½	204½	206	207	208½	210
.1	199	200	201½	202½	204	205	206½	207½	209	210
.2	199	200½	201½	203	204	205½	206½	208	209	210½
.3	199½	200½	202	203½	204½	206	207	208½	209½	211
.4	200	201	202½	203½	205	206	207½	208½	210	211
.5	200	201½	202½	204	205	206½	208	209	210½	211½
.6	200½	202	203	204½	205½	207	208	209½	210½	212
.7	201	202	203½	204½	206	207	208½	210	211	212½
.8	201	202½	204	205	206½	207½	209	210	211½	212½
.9	201½	203	204	205½	206½	208	209	210½	212	213
58.0	202	203	204½	205½	207	208½	209½	211	212	213½
.1	202½	203½	205	206	207½	208½	210	211	212½	214
.2	202½	204	205	206½	207½	209	210½	211½	213	214
.3	203	204	205½	207	208	209½	210½	212	213½	214½
.4	203½	204½	206	207	208½	209½	211	212½	213½	215
.5	203½	205	206	207½	209	210	211½	212½	214	215½
.6	204	205½	206½	208	209	210½	211½	213	214½	215½
.7	204½	205½	207	208	209½	211	212	213½	214½	216
.8	204½	206	207½	208½	210	211	212½	214	215	216½
.9	205	206½	207½	209	210	211½	213	214	215½	217
59.0	205½	206½	208	209½	210½	212	213	214½	216	217
.1	206	207	208½	209½	211	212	213½	215	216	217½
.2	206	207½	208½	210	211½	212½	214	215	216½	218
.3	206½	208	209	210½	211½	213	214½	215½	217	218
.4	207	208	209½	210½	212	213½	214½	216	217½	218½
.5	207	208½	210	211	212½	213½	215	216½	217½	219
.6	207½	209	210	211½	212½	214	215½	216½	218	219½
.7	208	209	210½	212	213	214½	215½	217	218½	219½
.8	208	209½	211	212	213½	215	216	217½	218½	220
.9	208½	210	211	212½	214	215	216½	218	219	220½

Lengths.	32. MEAN DIAMETERS.									
	32.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
60.0	209	210	211½	213	214	215½	217	218	219½	221
.1	209	210½	212	213	214½	216	217	218½	220	221
.2	209½	211	212	213½	215	216	217½	219	220	221½
.3	210	211½	212½	214	215	216½	218	219	220½	222
.4	210½	211½	213	214½	215½	217	218	219½	221	222½
.5	210½	212	213½	214½	216	217½	218½	220	221½	222½
.6	211	212½	213½	215	216½	217½	219	220½	221½	223
.7	211½	212½	214	215½	216½	218	219½	220½	222	223½
.8	211½	213	214½	215½	217	218½	219½	221	222½	224
.9	212	213½	214½	216	217½	218½	220	221½	223	224
61.0	212½	213½	215	216½	217½	219	220½	222	223	224½
.1	212½	214	215½	216½	218	219½	221	222	223½	225
.2	213	214½	215½	217	218½	220	221	222½	224	225
.3	213½	215	216	217½	219	220	221½	223	224	225½
.4	214	215	216½	218	219	220½	222	223	224½	226
.5	214	215½	217	218	219½	221	222	223½	225	226½
.6	214½	216	217	218½	220	221	222½	224	225½	226½
.7	215	216	217½	219	220	221½	223	224½	225½	227
.8	215	216½	218	219	220½	222	223½	224½	226	227½
.9	215½	217	218	219½	221	222½	223½	225	226½	228
62.0	216	217	218½	220	221½	222½	224	225½	227	228
.1	216	217½	219	220½	221½	223	224½	226	227	228½
.2	216½	218	219½	220½	222	223½	225	226	227½	229
.3	217	218½	219½	221	222½	223½	225	226½	228	229½
.4	217½	218½	220	221½	222½	224	225½	227	228½	229½
.5	217½	219	220½	221½	223	224½	226	227	228½	230
.6	218	219½	220½	222	223½	225	226	227½	229	230½
.7	218½	219½	221	222½	224	225	226½	228	229½	230½
.8	218½	220	221½	223	224	225½	227	228½	229½	231
.9	219	220½	221½	223	224½	226	227½	228½	230	231½
63.0	219½	220½	222	223½	225	226	227½	229	230½	232
.1	219½	221	222½	224	225	226½	228	229½	231	232
.2	220	221½	223	224	225½	227	228½	230	231	232½
.3	220½	222	223	224½	226	227½	228½	230	231½	233
.4	220½	222	223½	225	226½	227½	229	230½	232	233½
.5	221	222½	224	225	226½	228	229½	231	232½	233½
.6	221½	223	224	225½	227	228½	230	231	232½	234
.7	222	223	224½	226	227½	229	230	231½	233	234½
.8	222	223½	225	226½	227½	229	230½	232	233½	235
.9	222½	224	225½	226½	228	229½	231	232½	233½	235

Lengths.	32. MEAN DIAMETERS.									
	32.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
64.0	223	224	225½	227	228½	230	231½	232½	234	235½
.1	223	224½	226	227½	229	230	231½	233	234½	236
.2	223½	225	226½	227½	229	230½	232	233½	235	236½
.3	224	225½	226½	228	229½	231	232½	234	235	236½
.4	224	225½	227	228½	230	231½	232½	234	235½	237
.5	224½	226	227½	229	230	231½	233	234½	236	237½
.6	225	226½	227½	229	230½	232	233½	235	236½	237½
.7	225½	226½	228	229½	231	232½	234	235	236½	238
.8	225½	227	228½	230	231½	232½	234	235½	237	238½
.9	226	227½	229	230	231½	233	234½	236	237½	239
65.0	226½	227½	229	230½	232	233½	235	236½	238	239
.1	226½	228	229½	231	232½	234	235	236½	238	239½
.2	227	228½	230	231½	232½	234	235½	237	238½	240
.3	227½	229	230	231½	233	234½	236	237½	239	240½
.4	227½	229	230½	232	233½	235	236½	238	239	240½
.5	228	229½	231	232½	234	235	236½	238	239½	241
.6	228½	230	231½	232½	234	235½	237	238½	240	241½
.7	228½	230	231½	233	234½	236	237½	239	240½	242
.8	229	230½	232	233½	235	236½	238	239	240½	242
.9	229½	231	232½	234	235	236½	238	239½	241	242½
66.0	230	231	232½	234	235½	237	238½	240	241½	243
.1	230	231½	233	234½	236	237½	239	240½	242	243½
.2	230½	232	233½	235	236½	237½	239	240½	242	243½
.3	231	232½	233½	235	236½	238	239½	241	242½	244
.4	231	232½	234	235½	237	238½	240	241½	243	244½
.5	231½	233	234½	236	237½	239	240½	242	243	244½
.6	232	233½	235	236	237½	239	240½	242	243½	245
.7	232	233½	235	236½	238	239½	241	242½	244	245½
.8	232½	234	235½	237	238½	240	241½	243	244½	246
.9	233	234½	236	237½	239	240½	241½	243	244½	246
67.0	233½	234½	236	237½	239	240½	242	243½	245	246½
.1	233½	235	236½	238	239½	241	242½	244	245½	247
.2	234	235½	237	238½	240	241½	243	244½	246	247½
.3	234½	236	237	238½	240	241½	243	244½	246	247½
.4	234½	236	237½	239	240½	242	243½	245	246½	248
.5	235	236½	238	239½	241	242½	244	245½	247	248½
.6	235½	237	238½	240	241½	243	244½	246	247½	249
.7	235½	237	238½	240	241½	243	244½	246	247½	249
.8	236	237½	239	240½	242	243½	245	246½	248	249½
.9	236½	238	239½	241	242½	244	245½	247	248½	250

Lengths.	32. MEAN DIAMETERS.									
	32.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
68. 0	236½	238	239½	241	242½	244	245½	247	248½	250½
.1	237	238½	240	241½	243	244½	246	247½	249	250½
.2	237½	239	240½	242	243½	245	246½	248	249½	251
.3	238	239½	241	242½	244	245½	247	248½	250	251½
.4	238	239½	241	242½	244	245½	247	248½	250	251½
.5	238½	240	241½	243	244½	246	247½	249	250½	252
.6	239	240½	242	243½	245	246½	248	249½	251	252½
.7	239	240½	242	243½	245	246½	248	250	251½	253
.8	239½	241	242½	244	245½	247	248½	250	251½	253
.9	240	241½	243	244½	246	247½	249	250½	252	253½
69. 0	240	241½	243	245	246½	248	249½	251	252½	254
.1	240½	242	243½	245	246½	248	249½	251	253	254½
.2	241	242½	244	245½	247	248½	250	251½	253	254½
.3	241½	243	244½	246	247½	249	250½	252	253½	255
.4	241½	243	244½	246	247½	249	251	252½	254	255½
.5	242	243½	245	246½	248	249½	251	252½	254	256
.6	242½	244	245½	247	248½	250	251½	253	254½	256
.7	242½	244	245½	247	249	250½	252	253½	255	256½
.8	243	244½	246	247½	249	250½	252	254	255½	257
.9	243½	245	246½	248	249½	251	252½	254	255½	257
70. 0	243½	245	247	248½	250	251½	253	254½	256	257½
.1	244	245½	247	248½	250	251½	253½	255	256½	258
.2	244½	246	247½	249	250½	252	253½	255	257	258½
.3	245	246½	248	249½	251	252½	254	255½	257	258½
.4	245	246½	248	249½	251½	253	254½	256	257½	259
.5	245½	247	248½	250	251½	253	254½	256½	258	259½
.6	246	247½	249	250½	252	253½	255	256½	258	260
.7	246	247½	249	251	252½	254	255½	257	258½	260
.8	246½	248	249½	251	252½	254½	256	257½	259	260½
.9	247	248½	250	251½	253	254½	256	258	259½	261

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
36. 0	133½	134	135	135½	136½	137½	138	139	140	140½
.1	133½	134½	135½	136	137	137½	138½	139½	140	141
.2	134	135	135½	136½	137½	138	139	140	140½	141½
.3	134½	135	136	137	137½	138½	139½	140	141	142
.4	135	135½	136½	137	138	139	139½	140½	141½	142
.5	135	136	137	137½	138½	139½	140	141	142	142½
.6	135½	136½	137	138	139	139½	140½	141½	142	143
.7	136	136½	137½	138½	139	140	141	141½	142½	143½
.8	136½	137	138	138½	139½	140½	141½	142	143	144
.9	136½	137½	138½	139	140	141	141½	142½	143½	144

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
37.0	137	138	138½	139½	140½	141	142	143	143½	144½
.1	137½	138	139	140	140½	141½	142½	143½	144	145
.2	137½	138½	139½	140½	141	142	143	143½	144½	145½
.3	138	139	140	140½	141½	142½	143	144	145	145½
.4	138½	139½	140	141	142	142½	143½	144½	145½	146
.5	139	139½	140½	141½	142	143	144	145	145½	146½
.6	139	140	141	142	142½	143½	144½	145	146	147
.7	139½	140½	141½	142	143	144	144½	145½	146½	147½
.8	140	141	141½	142½	143½	144	145	146	147	147½
.9	140½	141	142	143	144	144½	145½	146½	147	148
38.0	140½	141½	142½	143½	144	145	146	146½	147½	148½
.1	141	142	143	143½	144½	145½	146	147	148	149
.2	141½	142½	143	144	145	146	146½	147½	148½	149½
.3	142	142½	143½	144½	145½	146	147	148	148½	149½
.4	142	143	144	145	145½	146½	147½	148½	149	150
.5	142½	143½	144½	145	146	147	148	148½	149½	150½
.6	143	144	144½	145½	146½	147½	148	149	150	151
.7	143½	144	145	146	147	147½	148½	149½	150½	151
.8	143½	144½	145½	146½	147	148	149	150	150½	151½
.9	144	145	146	146½	147½	148½	149½	150	151	152
39.0	144½	145½	146	147	148	149	149½	150½	151½	152½
.1	145	145½	146½	147½	148½	149	150	151	152	153
.2	145	146	147	148	148½	149½	150½	151½	152½	153
.3	145½	146½	147½	148	149	150	151	152	152½	153½
.4	146	147	147½	148½	149½	150½	151	152	153	154
.5	146½	147	148	149	150	150½	151½	152½	153½	154½
.6	146½	147½	148½	149½	150	151	152	153	154	154½
.7	147	148	149	149½	150½	151½	152½	153½	154	155
.8	147½	148½	149	150	151	152	153	153½	154½	155½
.9	147½	148½	149½	150½	151½	152	153	154	155	156
40.0	148	149	150	151	151½	152½	153½	154½	155½	156½
.1	148½	149½	150½	151	152	153	154	155	156	156½
.2	149	149½	150½	151½	152½	153½	154½	155	156	157
.3	149	150	151	152	153	154	154½	155½	156½	157½
.4	149½	150½	151½	152½	153	154	155	156	157	158
.5	150	151	152	152½	153½	154½	155½	156½	157½	158
.6	150½	151	152	153	154	155	156	157	157½	158½
.7	150½	151½	152½	153½	154½	155½	156	157	158	159
.8	151	152	153	154	155	155½	156½	157½	158½	159½
.9	151½	152½	153½	154	155	156	157	158	159	160

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
41.0	152	152½	153½	154½	155½	156½	157½	158½	159½	160
.1	152	153	154	155	156	157	158	158½	159½	160½
.2	152½	153½	154½	155½	156½	157	158	159	160	161
.3	153	154	155	155½	156½	157½	158½	159½	160½	161½
.4	153½	154	155	156	157	158	159	160	161	162
.5	153½	154½	155½	156½	157½	158½	159½	160	161	162
.6	154	155	156	157	158	158½	159½	160½	161½	162½
.7	154½	155½	156½	157	158	159	160	161	162	163
.8	155	155½	156½	157½	158½	159½	160½	161½	162½	163½
.9	155	156	157	158	159	160	161	162	163	163½
42.0	155½	156½	157½	158½	159½	160½	161	162	163	164
.1	156	157	158	158½	159½	160½	161½	162½	163½	164½
.2	156	157	158	159	160	161	162	163	164	165
.3	156½	157½	158½	159½	160½	161½	162½	163½	164½	165½
.4	157	158	159	160	161	162	163	163½	164½	165½
.5	157½	158½	159½	160	161	162	163	164	165	166
.6	157½	158½	159½	160½	161½	162½	163½	164½	165½	166½
.7	158	159	160	161	162	163	164	165	166	167
.8	158½	159½	160½	161½	162½	163½	164½	165½	166	167
.9	159	160	161	161½	162½	163½	164½	165½	166½	167½
43.0	159	160	161	162	163	164	165	166	167	168
.1	159½	160½	161½	162½	163½	164½	165½	166½	167½	168½
.2	160	161	162	163	164	165	166	167	168	169
.3	160½	161½	162½	163½	164	165	166	167	168	169
.4	160½	161½	162½	163½	164½	165½	166½	167½	168½	169½
.5	161	162	163	164	165	166	167	168	169	170
.6	161½	162½	163½	164½	165½	166½	167½	168½	169½	170½
.7	162	163	164	165	165½	166½	167½	168½	169½	170½
.8	162	163	164	165	166	167	168	169	170	171
.9	162½	163½	164½	165½	166½	167½	168½	169½	170½	171½
44.0	163	164	165	166	167	168	169	170	171	172
.1	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
.2	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
.3	164	165	166	167	168	169	170	171	172	173
.4	164½	165½	166½	167½	168½	169½	170½	171½	172½	173½
.5	165	166	167	168	169	170	171	172	173	174
.6	165	166	167	168	169	170	171	172	173	174½
.7	165½	166½	167½	168½	169½	170½	171½	172½	173½	174½
.8	166	167	168	169	170	171	172	173	174	175
.9	166	167½	168½	169½	170½	171½	172½	173½	174½	175½

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
45.0	166½	167½	168½	169½	170½	171½	172½	174	175	176
.1	167	168	169	170	171	172	173	174	175	176
.2	167½	168½	169½	170½	171½	172½	173½	174½	175½	176½
.3	167½	168½	170	171	172	173	174	175	176	177
.4	168	169	170	171	172	173	174½	175½	176½	177½
.5	168½	169½	170½	171½	172½	173½	174½	175½	176½	178
.6	169	170	171	172	173	174	175	176	177	178
.7	169	170	171½	172½	173½	174½	175½	176½	177½	178½
.8	169½	170½	171½	172½	173½	175	176	177	178	179
.9	170	171	172	173	174	175	176	177	178½	179½
46.0	170½	171½	172½	173½	174½	175½	176½	177½	178½	179½
.1	170½	171½	173	174	175	176	177	178	179	180
.2	171	172	173	174	175	176½	177½	178½	179½	180½
.3	171½	172½	173½	174½	175½	176½	177½	179	180	181
.4	172	173	174	175	176	177	178	179	180	181½
.5	172	173	174½	175½	176½	177½	178½	179½	180½	181½
.6	172½	173½	174½	175½	176½	178	179	180	181	182
.7	173	174	175	176	177	178	179½	180½	181½	182½
.8	173½	174½	175½	176½	177½	178½	179½	180½	182	183
.9	173½	174½	176	177	178	179	180	181	182	183½
47.0	174	175	176	177	178½	179½	180½	181½	182½	183½
.1	174½	175½	176½	177½	178½	179½	181	182	183	184
.2	175	176	177	178	179	180	181	182½	183½	184½
.3	175	176	177½	178½	179½	180½	181½	182½	183½	185
.4	175½	176½	177½	178½	180	181	182	183	184	185
.5	176	177	178	179	180	181	182½	183½	184½	185½
.6	176	177½	178½	179½	180½	181½	182½	184	185	186
.7	176½	177½	179	180	181	182	183	184	185½	186½
.8	177	178	179	180	181½	182½	183½	184½	185½	187
.9	177½	178½	179½	180½	181½	183	184	185	186	187
48.0	177½	179	180	181	182	183	184	185½	186½	187½
.1	178	179	180½	181½	182½	183½	184½	185½	187	188
.2	178½	179½	180½	181½	183	184	185	186	187	188½
.3	179	180	181	182	183	184½	185½	186½	187½	188½
.4	179	180½	181½	182½	183½	184½	186	187	188	189
.5	179½	180½	182	183	184	185	186	187½	188½	189½
.6	180	181	182	183	184½	185½	186½	187½	189	190
.7	180½	181½	182½	183½	184½	186	187	188	189	190½
.8	180½	182	183	184	185	186	187½	188½	189½	190½
.9	181	182	183½	184½	185½	186½	187½	189	190	191

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
49.0.....	181½	182½	183½	184½	186	187	188	189	190½	191½
.1.....	182	183	184	185	186	187½	188½	189½	190½	192
.2.....	182	183½	184½	185½	186½	187½	189	190	191	192
.3.....	182½	183½	185	186	187	188	189	190½	191½	192½
.4.....	183	184	185	186	187½	188½	189½	191	192	193
.5.....	183½	184½	185½	186½	187½	189	190	191	192½	193½
.6.....	183½	185	186	187	188	189½	190½	191½	192½	194
.7.....	184	185	186½	187½	188½	189½	191	192	193	194
.8.....	184½	185½	186½	188	189	190	191	192½	193½	194½
.9.....	185	186	187	188	189½	190½	191½	192½	194	195
50.0.....	185	186½	187½	188½	189½	191	192	193	194	195½
.1.....	185½	186½	188	189	190	191	192½	193½	194½	196
.2.....	186	187	188	189½	190½	191½	192½	194	195	196
.3.....	186	187½	188½	189½	191	192	193	194	195½	196½
.4.....	186½	187½	189	190	191	192½	193½	194½	196	197
.5.....	187	188	189½	190½	191½	192½	194	195	196	197½
.6.....	187½	188½	189½	191	192	193	194	195½	196½	197½
.7.....	187½	189	190	191	192½	193½	194½	196	197	198
.8.....	188	189	190½	191½	192½	194	195	196	197½	198½
.9.....	188½	189½	191	192	193	194	195½	196½	197½	199
51.0.....	189	190	191	192½	193½	194½	196	197	198	199½
.1.....	189	190½	191½	192½	194	195	196	197½	198½	199½
.2.....	189½	190½	192	193	194	195½	196½	197½	199	200
.3.....	190	191	192½	193½	194½	195½	197	198	199½	200½
.4.....	190½	191½	192½	194	195	196	197½	198½	199½	201
.5.....	190½	192	193	194	195½	196½	197½	199	200	201
.6.....	191	192	193½	194½	195½	197	198	199	200½	201½
.7.....	191½	192½	194	195	196	197½	198½	199½	201	202
.8.....	192	193	194	195½	196½	197½	199	200	201	202½
.9.....	192	193½	194½	195½	197	198	199	200½	201½	203
52.0.....	192½	193½	195	196	197	198½	199½	201	202	203
.1.....	193	194	195½	196½	197½	199	200	201	202½	203½
.2.....	193½	194½	195½	197	198	199	200½	201½	203	204
.3.....	193½	195	196	197	198½	199½	201	202	203	204½
.4.....	194	195	196½	197½	198½	200	201	202½	203½	204½
.5.....	194½	195½	196½	198	199	200½	201½	202½	204	205
.6.....	195	196	197	198½	199½	200½	202	203	204½	205½
.7.....	195	196½	197½	198½	200	201	202½	203½	204½	206
.8.....	195½	196½	198	199	200½	201½	202½	204	205	206½
.9.....	196	197	198	199½	200½	202	203	204½	205½	206½

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
53.0	196	197½	198½	200	201	202	203½	204½	206	207
.1	196½	198	199	200	201½	202½	204	205	206½	207½
.2	197	198	199½	200½	202	203	204	205½	206½	208
.3	197½	198½	199½	201	202	203½	204½	206	207	208½
.4	197½	199	200	201½	202½	204	205	206	207½	208½
.5	198	199½	200½	201½	203	204	205½	206½	208	209
.6	198½	199½	201	202	203½	204½	205½	207	208	209½
.7	199	200	201	202½	203½	205	206	207½	208½	210
.8	199	200½	201½	203	204	205½	206½	207½	209	210
.9	199½	201	202	203	204½	205½	207	208	209½	210½
54.0	200	201	202½	203½	205	206	207½	208½	210	211
.1	200½	201½	202½	204	205	206½	207½	209	210	211½
.2	200½	202	203	204½	205½	207	208	209½	210½	212
.3	201	202½	203½	204½	206	207	208½	209½	211	212
.4	201½	202½	204	205	206½	207½	209	210	211½	212½
.5	202	203	204	205½	206½	208	209	210½	211½	213
.6	202	203½	204½	206	207	208½	209½	211	212	213½
.7	202½	204	205	206	207½	208½	210	211	212½	213½
.8	203	204	205½	206½	208	209	210½	211½	213	214
.9	203½	204½	205½	207	208	209½	210½	212	213	214½
55.0	203½	205	206	207½	208½	210	211	212½	213½	215
.1	204	205½	206½	207½	209	210	211½	213	214	215½
.2	204½	205½	207	208	209½	210½	212	213	214½	215½
.3	205	206	207	208½	209½	211	212½	213½	215	216
.4	205	206½	207½	209	210	211½	212½	214	215	216½
.5	205½	206½	208	209	210½	212	313	214½	215½	217
.6	206	207	208½	209½	211	212	213½	214½	216	217
.7	206	207½	208½	210	211½	212½	214	215	216½	217½
.8	206½	208	209	210½	211½	213	214	215½	216½	218
.9	207	208	209½	211	212	213½	214½	216	217	218½
56.0	207½	208½	210	211	212½	213½	215	216	217½	219
.1	207½	209	210	211½	213	214	215½	216½	218	219
.2	208	209½	210½	212	213	214½	215½	217	218½	219½
.3	208½	209½	211	212½	213½	215	216	217½	218½	220
.4	209	210	211½	212½	214	215	216½	218	219	220½
.5	209	210½	211½	213	214½	215½	217	218	219½	221
.6	209½	211	212	213½	214½	216	217½	218½	220	221
.7	210	211	212½	214	215	216½	217½	219	220	221½
.8	210½	211½	213	214	215½	216½	218	219½	220½	222
.9	210½	212	213	214½	216	217	218½	219½	221	222½

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
57.0	211	21~½	213½	215	216	217½	219	220	221½	222½
.1	211½	212½	214	215½	216½	218	219	220½	222	223
.2	212	213	214½	215½	217	218½	219½	221	222	223½
.3	212	213½	214½	216	217½	218½	220	221½	222½	224
.4	212½	214	215	216½	217½	219	220½	221½	223	224½
.5	213	214	215½	217	218	219½	220½	222	223½	224½
.6	213½	214½	216	217	218½	220	221	222½	223½	225
.7	213½	215	216	217½	219	220	221½	223	224	225½
.8	214	215½	216½	218	219	220½	222	223	224½	226
.9	214½	215½	217	218½	219½	221	222	223½	225	226
58.0	215	216	217½	218½	220	221½	222½	224	225½	226½
.1	215	216½	217½	219	220½	221½	223	224½	225½	227
.2	215½	217	218	219½	220½	222	223½	224½	226	227½
.3	216	217	218½	220	221	222½	224	225	226½	228
.4	216	217½	219	220	221½	223	224	225½	227	228
.5	216½	218	219	220½	222	223	224½	226	227	228½
.6	217	218½	219½	221	222½	223½	225	226½	227½	229
.7	217½	218½	220	221½	222½	224	225½	226½	228	229½
.8	217½	219	220½	221½	223	224½	225½	227	228½	230
.9	218	219½	220½	222	223½	224½	226	227½	229	230
59.0	218½	220	221	222½	224	225	226½	228	229	230½
.1	219	220	221½	223	224	225½	227	228	229½	231
.2	219	220½	222	223	224½	226	227	228½	230	231½
.3	219½	221	222	223½	225	226½	227½	229	230½	231½
.4	220	221½	222½	224	225½	226½	228	229½	230½	232
.5	220½	221½	223	224½	225½	227	228½	230	231	232½
.6	220½	222	223½	224½	226	227½	229	230	231½	233
.7	221	222½	223½	225	226½	228	229	230½	232	233½
.8	221½	223	224	225½	227	228	229½	231	232½	233½
.9	222	223	224½	226	227	228½	230	231½	232½	234
60.0	222	223½	225	226	227½	229	230½	231½	233	234½
.1	222½	224	225	226½	228	229½	230½	232	233½	235
.2	223	224	225½	227	228½	229½	231	232½	234	235
.3	223½	224½	226	227½	228½	230	231½	233	234	235½
.4	223½	225	226½	227½	229	230½	232	233	234½	236
.5	224	225½	226½	228	229½	231	232	233½	235	236½
.6	224½	225½	227	228½	230	231	232½	234	235½	237
.7	224½	226	227½	229	230	231½	233	234½	236	237
.8	225	226½	228	229	230½	232	233½	235	236	237½
.9	225½	227	228	229½	231	232½	234	235	236½	238

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
61.0	226	227	228½	230	231½	233	234	235½	237	238½
.1	226	227½	229	230½	231½	233	234½	236	237½	238½
.2	226½	228	229½	230½	232	233½	235	236½	237½	239
.3	227	228½	229½	231	232½	234	235½	236½	238	239½
.4	227½	228½	230	231½	233	234½	235½	237	238½	240
.5	227½	229	230½	232	233½	234½	236	237½	239	240½
.6	228	229½	231	232	233½	235	236½	238	239½	240½
.7	228½	230	231	232½	234	235½	237	238	239½	241
.8	229	230	231½	233	234½	236	237	238½	240	241½
.9	229	230½	232	233½	235	236	237½	239	240½	242
62.0	229½	231	232½	234	235	236½	238	239½	241	242½
.1	230	231½	232½	234	235½	237	238½	240	241	242½
.2	230½	231½	233	234½	236	237½	239	240	241½	243
.3	230½	232	233½	235	236½	237½	239	240½	242	243½
.4	231	232½	234	235½	236½	238	239½	241	242½	244
.5	231½	233	234	235½	237	238½	240	241½	243	244
.6	232	233	234½	236	237½	239	240½	241½	243	244½
.7	232	233½	235	236½	238	239	240½	242	243½	245
.8	232½	234	235½	237	238	239½	241	242½	244	245½
.9	233	234½	235½	237	238½	240	241½	243	244½	246
63.0	233½	234½	236	237½	239	240½	242	243½	244½	246
.1	233½	235	236½	238	339½	241	242	243½	245	246½
.2	234	235½	237	238½	239½	241	242½	244	245½	247
.3	234½	236	237	238½	240	241½	243	244½	246	247½
.4	234½	236	237½	239	240½	242	243½	245	246½	247½
.5	235	336½	238	239½	241	242½	243½	245	246½	248
.6	235½	237	238½	240	241	242½	244	245½	247	248½
.7	236	237½	238½	240	241½	243	244½	246	247½	249
.8	236	237½	239	240½	242	243½	245	246½	248	249½
.9	236½	238	239½	241	242½	244	245½	246½	248	249½
64.0	237	238½	240	241½	242½	244	245½	247	248½	250
.1	237½	239	240	241½	243	244½	246	247½	249	250½
.2	237½	239	240½	242	243½	245	246½	248	249½	251
.3	238	239½	241	242½	244	245½	247	248½	250	251
.4	238½	240	241½	243	244½	245½	247	248½	250	251½
.5	239	240½	241½	243	244½	246	247½	249	250½	252
.6	239	240½	242	243½	245	246½	248	249½	251	252½
.7	239½	241	242½	244	245½	247	248½	250	251½	253
.8	240	241½	243	244½	246	247½	248½	250	251½	253
.9	240½	242	243	244½	246	247½	249	250½	252	253½

Lengths.	33. MEAN DIAMETERS.									
	33.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
65.0	240½	242	243½	245	246½	248	249½	251	252½	254
.1	241	242½	244	245½	247	248½	250	251½	253	254½
.2	241½	243	244½	246	247½	249	250½	252	253½	255
.3	242	243	244½	246	247½	249	250½	252	253½	255
.4	242	243½	245	246½	248	249½	251	252½	254	255½
.5	242½	244	245½	247	248½	250	251½	253	254½	256
.6	243	244½	246	247½	249	250½	252	253½	255	256½
.7	243½	244½	246	247½	249	250½	252	253½	255	256½
.8	243½	245	246½	248	249½	251	252½	254	255½	257
.9	244	245½	247	248½	250	251½	253	254½	256	257½
66.0	244½	246	247½	249	250½	252	253½	255	256½	258
.1	244½	246	247½	249	250½	252	253½	255	257	258½
.2	245	246½	248	249½	251	252½	254	255½	257	258½
.3	245½	247	248½	250	251½	253	254½	256	257½	259
.4	246	247½	249	250½	252	253½	255	256½	258	259½
.5	246	247½	249	250½	252	253½	255½	257	258½	260
.6	246½	248	249½	251	252½	254	255½	257	258½	260
.7	247	248½	250	251½	253	254½	256	257½	259	260½
.8	247½	249	250½	252	253½	255	256½	258	259½	261
.9	247½	249	250½	252	253½	255½	257	258½	260	261½
67.0	248	249½	251	252½	254	255½	257	258½	260	262
.1	248½	250	251½	253	254½	256	257½	259	260½	262
.2	249	250½	252	253½	255	256½	258	259½	261	262½
.3	249	250½	252	253½	255½	257	258½	260	261½	263
.4	249½	251	252½	254	255½	257	258½	260½	262	263½
.5	250	251½	253	254½	256	257½	259	260½	262	263½
.6	250½	252	253½	255	256½	258	259½	261	262½	264
.7	250½	252	253½	255	257	258½	260	261½	263	264½
.8	251	252½	254	255½	257	258½	260	262	263½	265
.9	251½	253	254½	256	257½	259	260½	262	263½	265½
68.0	252	253½	255	256½	258	259½	261	262½	264	265½
.1	252	253½	255	257	258½	260	261½	263	264½	266
.2	252½	254	255½	257	258½	260	262	263½	265	266½
.3	253	254½	256	257½	259	260½	262	263½	265½	267
.4	253½	255	256½	258	259½	261	262½	264	265½	267½
.5	253½	255	256½	258½	260	261½	263	264½	266	267½
.6	254	255½	257	258½	260	262	263½	265	266½	268
.7	254½	256	257½	259	260½	262	263½	265½	267	268½
.8	254½	256½	258	259½	261	262½	264	265½	267	269
.9	255	256½	258	260	261½	263	264½	266	267½	269

Lengths.	33. MEAN DIAMETERS.									
	33.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
69.0	255½	257	258½	260	261½	263½	265	266½	268	269½
.1	256	257½	259	260½	262	263½	265	267	268½	270
.2	256	258	259½	261	262½	264	265½	267	269	270½
.3	256½	258	259½	261½	263	264½	266	267½	269	271
.4	257	258½	260	261½	263	265	266½	268	269½	271
.5	257½	259	260½	262	263½	265	267	268½	270	271½
.6	257½	259½	261	262½	264	265½	267	268½	270½	272
.7	258	259½	261	263	264½	266	267½	269	270½	272½
.8	258½	260	261½	263	264½	266½	268	269½	271	272½
.9	259	260½	262	263½	265	266½	268½	270	271½	273
70.0	259	261	262½	264	265½	267	268½	270½	272	273½
.1	259½	261	262½	264½	266	267½	269	270½	272½	274
.2	260	261½	263	264½	266½	268	269½	271	272½	274½
.3	260½	262	263½	265	266½	268	270	271½	273	274½
.4	260½	262	264	265½	267	268½	270	272	273½	275
.5	261	262½	264	266	267½	269	270½	272	274	275½
.6	261½	263	264½	266	268	269½	271	272½	274	276
.7	262	263½	265	266½	268	270	271½	273	274½	276
.8	262	263½	265½	267	268½	270	272	273½	275	276½
.9	262½	264	265½	267½	269	270½	272	274	275½	277

Lengths.	34. MEAN DIAMETERS.									
	34.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
37.0	145½	146½	147	148	149	149½	150½	151½	152½	153
.1	146	146½	147½	148½	149½	150	151	152	153	153½
.2	146	147	148	149	149½	150½	151½	152½	153	154
.3	146½	147½	148½	149	150	151	152	152½	153½	154½
.4	147	148	148½	149½	150½	151½	152	153	154	155
.5	147½	148½	149	150	151	152	152½	153½	154½	155½
.6	148	148½	149½	150½	151½	152	153	154	155	155½
.7	148	149	150	151	151½	152½	153½	154½	155	156
.8	148½	149½	150½	151	152	153	154	154½	155½	156½
.9	149	150	150½	151½	152½	153½	154½	155	156	157
38.0	149½	150	151	152	153	154	154½	155½	156½	157½
.1	149½	150½	151½	152½	153½	154	155	156	157	158
.2	150	151	152	153	153½	154½	155½	156½	157½	158
.3	150½	151½	152½	153	154	155	156	157	157½	158½
.4	151	152	152½	153½	154½	155½	156½	157	158	159
.5	151½	152	153	154	155	156	156½	157½	158½	159½
.6	151½	152½	153½	154½	155½	156	157	158	159	160
.7	152	153	154	155	155½	156½	157½	158½	159½	160½
.8	152½	153½	154½	155	156	157	158	159	160	160½
.9	153	154	154½	155½	156½	157½	158½	159½	160	161

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
39.0	153½	154	155	156	157	158	158½	159½	160½	161½
.1	153½	154½	155½	156½	157½	158	159	160	161	162
.2	154	155	156	157	157½	158½	159½	160½	161½	162½
.3	154½	155½	156½	157	158	159	160	161	162	163
.4	155	156	156½	157½	158½	159½	160½	161½	162	163
.5	155½	156	157	158	159	160	161	161½	162½	163½
.6	155½	156½	157½	158½	159½	160½	161	162	163	164
.7	156	157	158	159	159½	160½	161½	162½	163½	164½
.8	156½	157½	158½	159	160	161	162	163	164	165
.9	157	157½	158½	159½	160½	161½	162½	163½	164½	165
40.0	157	158	159	160	161	162	163	164	164½	165½
.1	157½	158½	159½	160½	161½	162½	163	164	165	166
.2	158	159	160	161	161½	162½	163½	164½	165½	166½
.3	158½	159½	160½	161	162	163	164	165	166	167
.4	159	159½	160½	161½	162½	163½	164½	165½	166½	167½
.5	159	160	161	162	163	164	165	166	167	167½
.6	159½	160½	161½	162½	163½	164½	165½	166	167	168
.7	160	161	162	163	164	164½	165½	166½	167½	168½
.8	160½	161½	162½	163	164	165	166	167	168	169
.9	161	161½	162½	163½	164½	165½	166½	167½	168½	169½
41.0	161	162	163	164	165	166	167	168	169	170
.1	161½	162½	163½	164½	165½	166½	167½	168½	169	170
.2	162	163	164	165	166	166½	167½	168½	169½	170½
.3	162½	163½	164	165	166	167	168	169	170	171
.4	162½	163½	164½	165½	166½	167½	168½	169½	170½	171½
.5	163	164	165	166	167	168	169	170	171	172
.6	163½	164½	165½	166½	167½	168½	169½	170½	171½	172½
.7	164	165	166	167	168	169	169½	170½	171½	172½
.8	164½	165½	166	167	168	169	170	171	172	173
.9	164½	165½	166½	167½	168½	169½	170½	171½	172½	173½
42.0	165	166	167	168	169	170	171	172	173	174
.1	165½	166½	167½	168½	169½	170½	171½	172½	173½	174½
.2	166	167	168	169	170	171	172	173	174	175
.3	166½	167	168	169	170	171	172	173	174	175
.4	166½	167½	168½	169½	170½	171½	172½	173½	174½	175½
.5	167	168	169	170	171	172	173	174	175	176
.6	167½	168½	169½	170½	171½	172½	173½	174½	175½	176½
.7	168	169	170	171	172	173	174	175	176	177
.8	168	169	170	171	172	173	174	175	176	177
.9	168½	169½	170½	171½	172½	173½	174½	175½	176½	177½

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
43.0	169	170	171	172	173	174	175	176	177	178
.1	169½	170½	171½	172½	173½	174½	175½	176½	177½	178½
.2	170	171	172	173	174	175	176	177	178	179
.3	170	171	172	173	174	175	176	177½	178½	179½
.4	170½	171½	172½	173½	174½	175½	176½	177½	178½	179½
.5	171	172	173	174	175	176	177	178	179	180
.6	171½	172½	173½	174½	175½	176½	177½	178½	179½	180½
.7	172	173	174	175	176	177	178	179	180	181
.8	172	173	174	175	176	177½	178½	179½	180½	181½
.9	172½	173½	174½	175½	176½	177½	178½	179½	181	182
44.0	173	174	175	176	177	178	179	180	181	182
.1	173½	174½	175½	176½	177½	178½	179½	180½	181½	182½
.2	173½	174½	176	177	178	179	180	181	182	183
.3	174	175	176	177	178	179½	180½	181½	182½	183½
.4	174½	175½	176½	177½	178½	179½	180½	182	183	184
.5	175	176	177	178	179	180	181	182	183	184½
.6	175½	176½	177½	178½	179½	180½	181½	182½	183½	184½
.7	175½	176½	178	179	180	181	182	183	184	185
.8	176	177	178	179	180	181½	182½	183½	184½	185½
.9	176½	177½	178½	179½	180½	181½	183	184	185	186
45.0	177	178	179	180	181	182	183	184	185½	186½
.1	177½	178½	179½	180½	181½	182½	183½	184½	185½	187
.2	177½	178½	180	181	182	183	184	185	186	187
.3	178	179	180	181	182½	183½	184½	185½	186½	187½
.4	178½	179½	180½	181½	182½	183½	185	186	187	188
.5	179	180	181	182	183	184	185	186½	187½	188½
.6	179	180½	181½	182½	183½	184½	185½	186½	188	189
.7	179½	180½	181½	183	184	185	186	187	188	189½
.8	180	181	182	183	184½	185½	186½	187½	188½	189½
.9	180½	181½	182½	183½	184½	186	187	188	189	190
46.0	181	182	183	184	185	186	187	188½	189½	190½
.1	181	182½	183½	184½	185½	186½	187½	188½	190	191
.2	181½	182½	183½	185	186	187	188	189	190	191½
.3	182	183	184	185	186½	187½	188½	189½	190½	191½
.4	182½	183½	184½	185½	186½	188	189	190	191	192
.5	183	184	185	186	187	188	189½	190½	191½	192½
.6	183	184	185½	186½	187½	188½	189½	191	192	193
.7	183½	184½	185½	187	188	189	190	191	192½	193½
.8	184	185	186	187	188½	189½	190½	191½	192½	194
.9	184½	185½	186½	187½	188½	190	191	192	193	194

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
47.0	184½	186	187	188	189	190	191½	192½	193½	194½
.1	185	186	187½	188½	189½	190½	191½	193	194	195
.2	185½	186½	187½	189	190	191	192	193	194½	195½
.3	186	187	188	189	190½	191½	192½	193½	195	196
.4	186½	187½	188½	189½	190½	192	193	194	195	196½
.5	186½	188	189	190	191	192	193½	194½	195½	196½
.6	187	188	189½	190½	191½	192½	193½	195	196	197
.7	187½	188½	189½	191	192	193	194	195½	196½	197½
.8	188	189	190	191	192½	193½	194½	195½	197	198
.9	188½	189½	190½	191½	192½	194	195	196	197	198½
48.0	188½	190	191	192	193	194	195½	196½	197½	199
.1	189	190	191½	192½	193½	194½	196	197	198	199
.2	189½	190½	191½	193	194	195	196	197½	198½	199½
.3	190	191	192	193	194½	195½	196½	197½	199	200
.4	190	191½	192½	193½	194½	196	197	198	199½	200½
.5	190½	191½	193	194	195	196½	197½	198½	199½	201
.6	191	192	193½	194½	195½	196½	198	199	200	201½
.7	191½	192½	193½	195	196	197	198	199½	200½	201½
.8	192	193	194	195	196½	197½	198½	200	201	202
.9	192	193½	194½	195½	196½	198	199	200	201½	202½
49.0	192½	193½	195	196	197	198½	199½	200½	202	203
.1	193	194	195½	196½	197½	198½	200	201	202	203½
.2	193½	194½	195½	197	198	199	200½	201½	202½	203½
.3	194	195	196	197	198½	199½	200½	202	203	204
.4	194	195½	196½	197½	199	200	201	202	203½	204½
.5	194½	195½	197	198	199	200½	201½	202½	204	205
.6	195	196	197	198½	199½	200½	202	203	204	205½
.7	195½	196½	197½	199	200	201	202½	203½	204½	206
.8	195½	197	198	199	200½	201½	202½	204	205	206
.9	196	197½	198½	199½	201	202	203	204½	205½	206½
50.0	196½	197½	199	200	201	202½	203½	204½	206	207
.1	197	198	199	200½	201½	202½	204	205	206½	207½
.2	197½	198½	199½	201	202	203	204½	205½	206½	208
.3	197½	199	200	201	202½	203½	204½	206	207	208½
.4	198	199½	200½	201½	203	204	205	206½	207½	208½
.5	198½	199½	201	202	203	204½	205½	206½	208	209
.6	199	200	201	202½	203½	205	206	207	208½	209½
.7	199½	200½	201½	203	204	205	206½	207½	209	210
.8	199½	201	202	203	204½	205½	207	208	209	210½
.9	200	201	202½	203½	205	206	207	208½	209½	211

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
51.0	200½	201½	203	204	205	206½	207½	209	210	211
.1	201	202	203	204½	205½	207	208	209	210½	211½
.2	201	202½	203½	205	206	207	208½	209½	211	212
.3	201½	203	204	205	206½	207½	209	210	211	212½
.4	202	203	204½	205½	207	208	209	210½	211½	213
.5	202½	203½	205	206	207	208½	209½	211	212	213½
.6	203	204	205	206½	207½	209	210	211	212½	213½
.7	203	204½	205½	207	208	209	210½	211½	213	214
.8	203½	205	206	207	208½	209½	211	212	213½	214½
.9	204	205	206½	207½	209	210	211½	212½	213½	215
52.0	204½	205½	207	208	209	210½	211½	213	214	215½
.1	205	206	207	208½	209½	211	212	213½	214½	216
.2	205	206½	207½	209	210	211	212½	213½	215	216
.3	205½	207	208	209	210½	211½	213	214	215½	216½
.4	206	207	208½	209½	211	212	213½	214½	216	217
.5	206½	207½	209	210	211	212½	213½	215	216	217½
.6	206½	208	209	210½	211½	213	214	215½	216½	218
.7	207	208½	209½	211	212	213½	214½	215½	217	218
.8	207½	208½	210	211	212½	213½	215	216	217½	218½
.9	208	209	210½	211½	213	214	215½	216½	218	219
53.0	208½	209½	211	212	213	214½	215½	217	218	219½
.1	208½	210	211	212½	213½	215	216	217½	218½	220
.2	209	210½	211½	213	214	215½	216½	218	219	220½
.3	209½	210½	212	213	214½	215½	217	218	219½	220½
.4	210	211	212½	213½	215	216	217½	218½	220	221
.5	210½	211½	213	214	215½	216½	218	219	220½	221½
.6	210½	212	213	214½	215½	217	218	219½	220½	222
.7	211	212½	213½	215	216	217½	218½	220	221	222½
.8	211½	212½	214	215	216½	217½	219	220½	221½	223
.9	212	213	214½	215½	217	218	219½	220½	222	223
54.0	212	213½	214½	216	217½	218½	220	221	222½	223½
.1	212½	214	215	216½	217½	219	220	221½	223	224
.2	213	214½	215½	217	218	219½	220½	222	223	224½
.3	213½	214½	216	217	218½	219½	221	222½	223½	225
.4	214	215	216½	217½	219	220	221½	222½	224	225½
.5	214	215½	216½	218	219½	220½	222	223	224½	225½
.6	214½	216	217	218½	219½	221	222	223½	225	226
.7	215	216½	217½	219	220	221½	222½	224	225	226½
.8	215½	216½	218	219	220½	222	223	224½	225½	227
.9	216	217	218½	219½	221	222	223½	225	226	227½

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
55.0	216	217½	218½	220	221½	222½	224	225	226½	228
.1	216½	218	219	220½	221½	223	224½	225½	227	228
.2	217	218	219½	221	222	223½	224½	226	227½	228½
.3	217½	218½	220	221	222½	224	225	226½	227½	229
.4	217½	219	220½	221½	223	224	225½	227	228	229½
.5	218	219½	220½	222	223½	224½	226	227	228½	230
.6	218½	220	221	222½	223½	225	226½	227½	229	230½
.7	219	220	221½	223	224	225½	226½	228	229½	230½
.8	219½	220½	222	223	224½	226	227	228½	230	231
.9	219½	221	222½	223½	225	226	227½	229	230	231½
56.0	220	221½	222½	224	225½	226½	228	229½	230½	232
.1	220½	222	223	224½	225½	227	228½	229½	231	232½
.2	221	222	223½	225	226	227½	229	230	231½	232½
.3	221½	222½	224	225	226½	228	229	230½	232	233
.4	221½	223	224½	225½	227	228	229½	231	232	233½
.5	222	223½	224½	226	227½	228½	230	231½	232½	234
.6	222½	224	225	226½	227½	229	230½	231½	233	234½
.7	223	224	225½	227	228	229½	231	232	233½	235
.8	223	224½	226	227	228½	230	231	232½	234	235
.9	223½	225	226½	227½	229	230½	231½	233	234½	235½
57.0	224	225½	226½	228	229½	230½	232	233½	234½	236
.1	224½	225½	227	228½	229½	231	232½	234	235	236½
.2	225	226	227½	229	230	231½	233	234	235½	237
.3	225	226½	228	229	230½	232	233	234½	236	237½
.4	225½	227	228½	229½	231	232½	233½	235	236½	237½
.5	226	227½	228½	230	231½	232½	234	235½	237	238
.6	226½	227½	229	230½	231½	233	234½	236	237	238½
.7	227	228	229½	231	232	233½	235	236	237½	239
.8	227	228½	230	231	232½	234	235½	236½	238	239½
.9	227½	229	230½	231½	233	234½	235½	237	238½	240
58.0	228	229½	230½	232	233½	234½	236	237½	239	240
.1	228½	229½	231	232½	234	235	236½	238	239	240½
.2	228½	230	231½	233	234	235½	237	238½	239½	241
.3	229	230½	232	233	234½	236	237½	238½	240	241½
.4	229½	231	232	233½	235	236½	237½	239	240½	242
.5	230	231½	232½	234	235½	236½	238	239½	241	242½
.6	230½	231½	233	234½	236	237	238½	240	241½	242½
.7	230½	232	233½	235	236	237½	239	240½	241½	243
.8	231	232½	234	235	236½	238	239½	240½	242	243½
.9	231½	233	234	235½	237	238½	239½	241	242½	244

Lengths.	34. MEAN DIAMETERS.									
	34.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
59.0	232	233½	234½	236	237½	239	240	241½	243	244½
.1	232½	233½	235	236½	238	239	240½	242	243½	244½
.2	232½	234	235½	237	238	239½	241	242½	244	245
.3	233	234½	236	237	238½	240	241½	243	244	245½
.4	233½	235	236	237½	239	240½	242	243	244½	246
.5	234	235	236½	238	239½	241	242	243½	245	246½
.6	234½	235½	237	238½	240	241	242½	244	245½	247
.7	234½	236	237½	239	240	241½	243	244½	246	247
.8	235	236½	238	239	240½	242	243½	245	246	247½
.9	235½	237	238	239½	241	242½	244	245	246½	248
60.0	236	237	238½	240	241½	243	244	245½	247	248½
.1	236	237½	239	240½	242	243	244½	246	247½	249
.2	236½	238	239½	241	242	243½	245	246½	248	249½
.3	237	238½	240	241	242½	244	245½	247	248½	249½
.4	237½	239	240	241½	243	244½	246	247½	248½	250
.5	238	239	240½	242	243½	245	246½	247½	249	250½
.6	238	239½	241	242½	244	245	246½	248	249½	251
.7	238½	240	241½	243	244	245½	247	248½	250	251½
.8	239	240½	242	243	244½	246	247½	249	250½	252
.9	239½	241	242	243½	245	246½	248	249½	251	252
61.0	240	241	242½	244	245½	247	248½	249½	251	252½
.1	240	241½	243	244½	246	247½	248½	250	251½	253
.2	240½	242	243½	245	246	247½	249	250½	252	253½
.3	241	242½	244	245	246½	248	249½	251	252½	254
.4	241½	242½	244	245½	247	248½	250	251½	253	254½
.5	241½	243	244½	246	247½	249	250½	252	253	254½
.6	242	243½	245	246½	248	249½	250½	252	253½	255
.7	242½	244	245½	247	248	249½	251	252½	254	255½
.8	243	244½	246	247	248½	250	251½	253	254½	256
.9	243½	244½	246	247½	249	250½	252	253½	255	256½
62.0	243½	245	246½	248	249½	251	252½	254	255½	257
.1	244	245½	247	248½	250	251½	253	254	255½	257
.2	244½	246	247½	249	250½	251½	253	254½	256	257½
.3	245	246½	248	249	250½	252	253½	255	256½	258
.4	245½	246½	248	249½	251	252½	254	255½	257	258½
.5	245½	247	248½	250	251½	253	254½	256	257½	259
.6	246	247½	249	250½	252	253½	255	256½	258	259
.7	246½	248	249½	251	252½	253½	255	256½	258	259½
.8	247	248½	249½	251	252½	254	255½	257	258½	260
.9	247	248½	250	251½	253	254½	256	257½	259	260½

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
63.0	247½	249	250½	252	253½	255	256½	258	259½	261
.1	248	249½	251	252½	254	255½	257	258½	260	261½
.2	248½	250	251½	253	254½	256	257	258½	260	261½
.3	249	250½	251½	253	254½	256	257½	259	260½	262
.4	249	250½	252	253½	255	256½	258	259½	261	262½
.5	249½	251	252½	254	255½	257	258½	260	261½	263
.6	250	251½	253	254½	256	257½	259	260½	262	263½
.7	250½	252	253½	255	256½	258	259½	261	262½	264
.8	251	252	253½	255	256½	258	259½	261	262½	264
.9	251	252½	254	255½	257	258½	260	261½	263	264½
64.0	251½	253	254½	256	257½	259	260½	262	263½	265
.1	252	253½	255	256½	258	259½	261	262½	264	265½
.2	252½	254	255½	257	258½	260	261½	263	264½	266
.3	252½	254	255½	257	258½	260	261½	263	265	266½
.4	253	254½	256	257½	259	260½	262	263½	265	266½
.5	253½	255	256½	258	259½	261	262½	264	265½	267
.6	254	255½	257	258½	260	261½	263	264½	266	267½
.7	254½	256	257½	259	260½	262	263½	265	266½	268
.8	254½	256	257½	259	260½	262	264	265½	267	268½
.9	255	256½	258	259½	261	262½	264	265½	267	269
65.0	255½	257	258½	260	261½	263	264½	266	267½	269
.1	256	257½	259	260½	262	263½	265	266½	268	269½
.2	256½	258	259½	261	262½	264	265½	267	268½	270
.3	256½	258	259½	261	262½	264½	266	267½	269	270½
.4	257	258½	260	261½	263	264½	266	267½	269½	271
.5	257½	259	260½	262	263½	265	266½	268	269½	271½
.6	258	259½	261	262½	264	265½	267	268½	270	271½
.7	258	259½	261½	263	264½	266	267½	269	270½	272
.8	258½	260	261½	263	264½	266½	268	269½	271	272½
.9	259	260½	262	263½	265	266½	268	270	271½	273
66.0	259½	261	262½	264	265½	267	268½	270	272	273½
.1	260	261½	263	264½	266	267½	269	270½	272	273½
.2	260	261½	263½	265	266½	268	269½	271	272½	274
.3	260½	262	263½	265	267	268½	270	271½	273	274½
.4	261	262½	264	265½	267	268½	270½	272	273½	275
.5	261½	263	264½	266	267½	269	270½	272	274	275½
.6	262	263½	265	266½	268	269½	271	272½	274	276
.7	262	263½	265½	267	268½	270	271½	273	274½	276
.8	262½	264	265½	267	269	270½	272	273½	275	276½
.9	263	264½	266	267½	269	270½	272½	274	275½	277

Lengths.	34. MEAN DIAMETERS.									
	34.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
67.0	263½	265	266½	268	269½	271	272½	274½	276	277½
.1	263½	265½	267	268½	270	271½	273	274½	276½	278
.2	264	265½	267	269	270½	272	273½	275	276½	278½
.3	264½	266	267½	269	271	272½	274	275½	277	278½
.4	265	266½	268	269½	271	273	274½	276	277½	279
.5	265½	267	268½	270	271½	273	274½	276½	278	279½
.6	265½	267½	269	270½	272	273½	275	276½	278½	280
.7	266	267½	269	271	272½	274	275½	277	279	280½
.8	266½	268	269½	271	273	274½	276	277½	279	281
.9	267	268½	270	271½	273	275	276½	278	279½	281
68.0	267½	269	270½	272	273½	275	277	278½	280	281½
.1	267½	269	271	272½	274	275½	277	279	280½	282
.2	268	269½	271	273	274½	276	277½	279	281	282½
.3	268½	270	271½	273	275	276½	278	279½	281	283
.4	269	270½	272	273½	275	277	278½	280	281½	283½
.5	269	271	272½	274	275½	277	279	280½	282	283½
.6	269½	271	273	274½	276	277½	279	281	282½	284
.7	270	271½	273	275	276½	278	279½	281½	283	284½
.8	270½	272	273½	275	277	278½	280	281½	283½	285
.9	271	272½	274	275½	277	279	280½	282	283½	285½
69.0	271	273	274½	276	277½	279	281	282½	284	285½
.1	271½	273	275	276½	278	279½	281½	283	284½	286
.2	272	273½	275	277	278½	280	281½	283½	285	286½
.3	272½	274	275½	277	279	280½	282	283½	285½	287
.4	273	274½	276	277½	279	281	282½	284	286	287½
.5	273	275	276½	278	279½	281½	283	284½	286	288
.6	273½	275	277	278½	280	281½	283½	285	286½	288
.7	274	275½	277	279	280½	282	283½	285½	287	288½
.8	274½	276	277½	279	281	282½	284	286	287½	289
.9	274½	276½	278	279½	281	283	284½	286	288	289½
70.0	275	276½	278½	280	281½	283½	285	286½	288	290
.1	275½	277	279	280½	282	283½	285½	287	288½	290½
.2	276	277½	279	281	282½	284	285½	287½	289	290½
.3	276½	278	279½	281	283	284½	286	288	289½	291
.4	276½	278½	280	281½	283	285	286½	288	290	291½
.5	277	278½	280½	282	283½	285½	287	288½	290½	292
.6	277½	279	281	282½	284	285½	287½	289	290½	292½
.7	278	279½	281	283	284½	286	288	289½	291	293
.8	278½	280	281½	283	285	286½	288	290	291½	293
.9	278½	280½	282	283½	285½	287	288½	290½	292	293½

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
39.0.....	162½	163½	164½	165	166	167	168	169	170	171
.1.....	163	164	164½	165½	166½	167½	168½	169½	170½	171½
.2.....	163½	164	165	166	167	168	169	170	171	172
.3.....	163½	164½	165½	166½	167½	168½	169½	170½	171½	172
.4.....	164	165	166	167	168	169	170	170½	171½	172½
.5.....	164½	165½	166½	167½	168½	169½	170	171	172	173
.6.....	165	166	167	168	168½	169½	170½	171½	172½	173½
.7.....	165½	166½	167	168	169	170	171	172	173	174
.8.....	166	166½	167½	168½	169½	170½	171½	172½	173½	174½
.9.....	166	167	168	169	170	171	172	173	174	175
40.0.....	166½	167½	168½	169½	170½	171½	172½	173½	174½	175½
.1.....	167	168	169	170	171	172	173	174	174½	175½
.2.....	167½	168½	169½	170½	171½	172½	173	174	175	176
.3.....	168	169	170	170½	171½	172½	173½	174½	175½	176½
.4.....	168½	169	170	171	172	173	174	175	176	177
.5.....	168½	169½	170½	171½	172½	173½	174½	175½	176½	177½
.6.....	169	170	171	172	173	174	175	176	177	178
.7.....	169½	170½	171½	172½	173½	174½	175½	176½	177½	178½
.8.....	170	171	172	173	174	175	176	177	178	179
.9.....	170½	171½	172½	173½	174½	175½	176	177	178	179
41.0.....	171	171½	172½	173½	174½	175½	176½	177½	178½	179½
.1.....	171	172	173	174	175	176	177	178	179	180
.2.....	171½	172½	173½	174½	175½	176½	177½	178½	179½	180½
.3.....	172	173	174	175	176	177	178	179	180	181
.4.....	172½	173½	174½	175½	176½	177½	178½	179½	180½	181½
.5.....	173	174	175	176	177	178	179	180	181	182
.6.....	173½	174½	175	176	177	178	179½	180½	181½	182½
.7.....	173½	174½	175½	176½	177½	178½	179½	180½	181½	182½
.8.....	174	175	176	177	178	179	180	181	182	183
.9.....	174½	175½	176½	177½	178½	179½	180½	181½	182½	183½
42.0.....	175	176	177	178	179	180	181	182	183	184
.1.....	175½	176½	177½	178½	179½	180½	181½	182½	183½	184½
.2.....	176	177	178	179	180	181	182	183	184	185
.3.....	176	177	178	179	180	181	182½	183½	184½	185½
.4.....	176½	177½	178½	179½	180½	181½	182½	183½	185	186
.5.....	177	178	179	180	181	182	183	184	185	186
.6.....	177½	178½	179½	180½	181½	182½	183½	184½	185½	186½
.7.....	178	179	180	181	182	183	184	185	186	187
.8.....	178½	179½	180½	181½	182½	183½	184½	185½	186½	187½
.9.....	178½	179½	180½	182	183	184	185	186	187	188

Lengths.	35. MEAN DIAMETERS.									
	35.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
43.0	179	180	181	182	183	184	185½	186½	187½	188½
.1	179½	180½	181½	182½	183½	184½	185½	187	188	189
.2	180	181	182	183	184	185	186	187	188	189½
.3	180½	181½	182½	183½	184½	185½	186½	187½	188½	189½
.4	181	182	183	184	185	186	187	188	189	190
.5	181	182	183½	184½	185½	186½	187½	188½	189½	190½
.6	181½	182½	183½	184½	186	187	188	189	190	191
.7	182	183	184	185	186	187	188½	189½	190½	191½
.8	182½	183½	184½	185½	186½	187½	188½	190	191	192
.9	183	184	185	186	187	188	189	190	191½	192½
44.0	183½	184½	185½	186½	187½	188½	189½	190½	191½	193
.1	183½	184½	186	187	188	189	190	191	192	193
.2	184	185	186	187½	188½	189½	190½	191½	192½	193½
.3	184½	185½	186½	187½	189	190	191	192	193	194
.4	185	186	187	188	189	190	191½	192½	193½	194½
.5	185½	186½	187½	188½	189½	190½	192	193	194	195
.6	186	187	188	189	190	191	192	193½	194½	195½
.7	186	187	188½	189½	190½	191½	192½	193½	195	196
.8	186½	187½	188½	190	191	192	193	194	195	196½
.9	187	188	189	190	191½	192½	193½	194½	195½	196½
45.0	187½	188½	189½	190½	191½	193	194	195	196	197
.1	188	189	190	191	192	193	194½	195½	196½	197½
.2	188½	189½	190½	191½	192½	193½	195	196	197	198
.3	188½	190	191	192	193	194	195	196½	197½	198½
.4	189	190	191½	192½	193½	194½	195½	196½	198	199
.5	189½	190½	191½	193	194	195	196	197	198½	199½
.6	190	191	192	193	194½	195½	196½	197½	198½	200
.7	190½	191½	192½	193½	194½	196	197	198	199	200½
.8	191	192	193	194	195	196	197½	198½	199½	200½
.9	191	192½	193½	194½	195½	196½	198	199	200	201
46.0	191½	192½	194	195	196	197	198	199½	200½	201½
.1	192	193	194	195½	196½	197½	198½	200	201	202
.2	192½	193½	194½	195½	197	198	199	200	201½	202½
.3	193	194	195	196	197½	198½	199½	200½	202	203
.4	193½	194½	195½	196½	197½	199	200	201	202	203½
.5	193½	195	196	197	198	199	200½	201½	202½	204
.6	194	195	196½	197½	198½	199½	201	202	203	204
.7	194½	195½	196½	198	199	200	201	202½	203½	204½
.8	195	196	197	198½	199½	200½	201½	203	204	205
.9	195½	196½	197½	198½	200	201	202	203	204½	205½

Lengths.	35. MEAN DIAMETERS.									
	35.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
47.0	196	197	198	199	200½	201½	202½	203½	205	206
.1	196	197½	198½	199½	200½	202	203	204	205	206½
.2	196½	197½	199	200	201	202	203½	204½	205½	207
.3	197	198	199½	200½	201½	202½	204	205	206	207½
.4	197½	198½	199½	201	202	203	204	205½	206½	207½
.5	198	199	200	201	202½	203½	204½	206	207	208
.6	198½	199½	200½	201½	203	204	205	206½	207½	208½
.7	198½	200	201	202	203	204½	205½	206½	208	209
.8	199	200	201½	202½	203½	205	206	207	208½	209½
.9	199½	200½	202	203	204	205	206½	207½	208½	210
48.0	200	201	202	203½	204½	205½	207	208	209	210½
.1	200½	201½	202½	204	205	206	207½	208½	209½	211
.2	201	202	203	204	205½	206½	207½	209	210	211
.3	201	202½	203½	204½	206	207	208	209½	210½	211½
.4	201½	202½	204	205	206	207½	208½	209½	211	212
.5	202	203	204½	205½	206½	208	209	210	211½	212½
.6	202½	203½	204½	206	207	208	209½	210½	212	213
.7	203	204	205	206½	207½	208½	210	211	212	213½
.8	203½	204½	205½	207	208	209	210½	211½	212½	214
.9	203½	205	206	207	208½	209½	210½	212	213	214½
49.0	204	205½	206½	207½	209	210	211	212½	213½	214½
.1	204½	205½	207	208	209	210½	211½	213	214	215
.2	205	206	207½	208½	209½	211	212	213	214½	215½
.3	205½	206½	207½	209	210	211	212½	213½	215	216
.4	206	207	208	209½	210½	211½	213	214	215½	216½
.5	206	207½	208½	209½	211	212	213½	214½	215½	217
.6	206½	208	209	210	211½	212½	213½	215	216	217½
.7	207	208	209½	210½	212	213	214	215½	216½	218
.8	207½	208½	210	211	212	213½	214½	216	217	218
.9	208	209	210	211½	212½	214	215	216	217½	218½
50.0	208½	209½	210½	212	213	214	215½	216½	218	219
.1	208½	210	211	212½	213½	214½	216	217	218½	219½
.2	209	210½	211½	212½	214	215	216½	217½	219	220
.3	209½	210½	212	213	214½	215½	216½	218	219	220½
.4	210	211	212½	213½	214½	216	217	218½	219½	221
.5	210½	211½	212½	214	215	216½	217½	219	220	221½
.6	210½	212	213	214½	215½	217	218	219½	220½	221½
.7	211	212½	213½	215	216	217	218½	219½	221	222
.8	211½	213	214	215	216½	217½	219	220	221½	222½
.9	212	213	214½	215½	217	218	219½	220½	222	223

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
51.0	212½	213½	215	216	217½	218½	220	221	222	223½
.1	213	214	215½	216½	217½	219	220	221½	222½	224
.2	213	214½	215½	217	218	219½	220½	222	223	224½
.3	213½	215	216	217½	218½	220	221	222½	223½	225
.4	214	215½	216½	218	219	220	221½	222½	224	225
.5	214½	215½	217	218	219½	220½	222	223	224½	225½
.6	215	216	217½	218½	220	221	222½	223½	225	226
.7	215½	216½	218	219	220½	221½	223	224	225½	226½
.8	215½	217	218	219½	220½	222	223	224½	225½	227
.9	216	217½	218½	220	221	222½	223½	225	226	227½
52.0	216½	218	219	220½	221½	223	224	225½	226½	228
.1	217	218	219½	220½	222	223	224½	226	227	228½
.2	217½	218½	220	221	222½	223½	225	226	227½	228½
.3	218	219	220½	221½	223	224	225½	226½	228	229
.4	218	219½	220½	222	223½	224½	226	227	228½	229½
.5	218½	220	221	222½	223½	225	226	227½	229	230
.6	219	220½	221½	223	224	225½	226½	228	229	230½
.7	219½	221	222	223½	224½	226	227	228½	229½	231
.8	220	221	222½	223½	225	226	227½	229	230	231½
.9	220½	221½	223	224	225½	226½	228	229	230½	232
53.0	220½	222	223½	224½	226	227	228½	229½	231	232
.1	221	222½	223½	225	226	227½	229	230	231½	232½
.2	221½	223	224	225½	226½	228	229	230½	232	233
.3	222	223½	224½	226	227	228½	229½	231	232½	233½
.4	222½	223½	225	226	227½	229	230	231½	232½	234
.5	223	224	225½	226½	228	229	230½	232	233	234½
.6	223	224½	226	227	228½	229½	231	232½	233½	235
.7	223½	225	226	227½	229	230	231½	232½	234	235½
.8	224	225½	226½	228	229	230½	232	233	234½	235½
.9	224½	226	227	228½	229½	231	232½	233½	235	236
54.0	225	226	227½	229	230	231½	232½	234	235½	236½
.1	225½	226½	228	229	230½	232	233	234½	235½	237
.2	225½	227	228½	229½	231	232	233½	235	236	237½
.3	226	227½	229	230	231½	232½	234	235½	236½	238
.4	226½	228	229	230½	232	233	234½	235½	237	238½
.5	227	228½	229½	231	232	233½	235	236	237½	239
.6	227½	228½	230	231½	232½	234	235½	236½	238	239½
.7	228	229	230½	231½	233	234½	235½	237	238½	239½
.8	228	229½	231	232	233½	235	236	237½	239	240
.9	228½	230	231½	232½	234	235	236½	238	239	240½

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
55.0	229	230½	231½	233	234½	235½	237	238½	239½	241
.1	229½	331	232	233½	235	236	237½	239	240	241½
.2	230	231	232½	234	235	236½	238	239	240½	242
.3	230½	231½	233	234½	235½	237	238½	239½	241	242½
.4	230½	232	233½	234½	236	237½	238½	240	241½	243
.5	231	232½	234	235	236½	238	239	240½	242	243
.6	231½	233	234	235½	237	238	239½	241	242½	243½
.7	232	233½	234½	236	237½	238½	240	241½	242½	244
.8	232½	233½	235	236½	237½	239	240½	242	243	244½
.9	233	234	235½	237	238	239½	241	242	243½	245
56.0	233	234½	236	237½	238½	240	241½	242½	244	245½
.1	233½	235	236½	237½	239	240½	241½	243	244½	246
.2	234	235½	237	238	239½	241	242	243½	245	246½
.3	234½	236	237	238½	240	241	242½	244	245½	246½
.4	235	236½	237½	239	240½	241½	243	244½	246	247
.5	235½	236½	238	239½	240½	242	243½	245	246	247½
.6	235½	237	238½	240	241	242½	244	245½	246½	248
.7	236	237½	239	240	241½	243	244½	245½	247	248½
.8	236½	238	239½	240½	242	243½	245	246	247½	249
.9	237	238½	239½	241	242½	244	245	246½	248	249½
57.0	237½	239	240	241½	243	244	245½	247	248½	250
.1	238	239	240½	242	243½	244½	246	247½	249	250
.2	238	239½	241	242½	243½	245	246½	248	249½	250½
.3	238½	240	241½	243	244	245½	247	248½	249½	251
.4	239	240½	242	243	244½	246	247½	248½	250	251½
.5	239½	241	242	243½	245	246½	248	249	250½	252
.6	240	241½	242½	244	245½	247	248	249½	251	252½
.7	240½	241½	243	244½	246	247	248½	250	251½	253
.8	240½	242	243½	245	246½	247½	249	250½	252	253½
.9	241	242½	244	245½	246½	248	249½	251	252½	253½
58.0	241½	243	244½	245½	247	248½	250	251½	252½	254
.1	242	243½	245	246	247½	249	250½	252	253	254½
.2	242½	244	245	246½	248	249½	251	252	253½	255
.3	243	244	245½	247	248½	250	251	252½	254	255½
.4	243	244½	246	247½	249	250	251½	253	254½	256
.5	243½	245	246½	248	249½	250½	252	253½	255	256½
.6	244	245½	247	248½	249½	251	252½	254	255½	257
.7	244½	246	247½	248½	250	251½	253	254½	256	257
.8	245	246½	247½	249	250½	252	253½	255	256	257½
.9	245½	246½	248	249½	251	252½	254	255	256½	258

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
59. 0.....	245½	247	248½	250	251½	253	254	255½	257	258½
.1.....	246	247½	249	250½	252	253	254½	256	257½	259
.2.....	246½	248	249½	251	252	253½	255	256½	258	259½
.3.....	247	248½	250	251	252½	254	255½	257	258½	260
.4.....	247½	249	250	251½	253	254½	256	257½	259	260½
.5.....	248	249	250½	252	253½	255	256½	258	259½	260½
.6.....	248	249½	251	252½	254	255½	257	258½	259½	261
.7.....	248½	250	251½	253	254½	256	257	258½	260	261½
.8.....	249	250½	252	253½	255	256	257½	259	260½	262
.9.....	249½	251	252½	254	255	256½	258	259½	261	262½
60. 0.....	250	251½	253	254	255½	257	258½	260	261½	263
.1.....	250½	251½	253	254½	256	257½	259	260½	262	263½
.2.....	250½	252	253½	255	256½	258	259½	261	262½	264
.3.....	251	252½	254	255½	257	258½	260	261½	263	264
.4.....	251½	253	254½	256	257½	259	260½	261½	263	264½
.5.....	252	253½	255	256½	258	259	260½	262	263½	265
.6.....	252½	254	255½	256½	258	259½	261	262½	264	265½
.7.....	253	254½	255½	257	258½	260	261½	263	264½	266
.8.....	253	254½	256	257½	259	260½	262	263½	265	266½
.9.....	253½	255	256½	258	259½	261	262½	264	265½	267
61. 0.....	254	255½	257	258½	260	261½	263	264½	266	267½
.1.....	254½	256	257½	259	260½	262	263½	265	266	267½
.2.....	255	256½	258	259½	261	262	263½	265	266½	268
.3.....	255½	257	258	259½	261	262½	264	265½	267	268½
.4.....	255½	257	258½	260	261½	263	264½	266	267½	269
.5.....	256	257½	259	260½	262	263½	265	266½	268	269½
.6.....	256½	258	259½	261	262½	264	265½	267	268½	270
.7.....	257	258½	260	261½	263	264½	266	267½	269	270½
.8.....	257½	259	260½	262	263½	265	266½	268	269½	271
.9.....	258	259½	261	262½	263½	265	266½	268	269½	271
62. 0.....	258	259½	261	262½	264	265½	267	268½	270	271½
.1.....	258½	260	261½	263	264½	266	267½	269	270½	272
.2.....	259	260½	262	263½	265	266½	268	269½	271	272½
.3.....	259½	261	262½	264	265½	267	268½	270	271½	273
.4.....	260	261½	263	264½	266	267½	269	270½	272	273½
.5.....	260½	262	263½	265	266½	268	269½	271	272½	274
.6.....	260½	262	263½	265	266½	268	269½	271½	273	274½
.7.....	261	262½	264	265½	267	268½	270	271½	273	274½
.8.....	261½	263	264½	266	267½	269	270½	272	273½	275
.9.....	262	263½	265	266½	268	269½	271	272½	274	275½

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
63.0	262½	264	265½	267	268½	270	271½	273	274½	276
.1	263	264½	266	267½	269	270½	272	273½	275	276½
.2	263	264½	266	268	269½	271	272½	274	275½	277
.3	263½	265	266½	268	269½	271	273	274½	276	277½
.4	264	265½	267	268½	270	271½	273	274½	276½	278
.5	264½	266	267½	269	270½	272	273½	275	276½	278½
.6	265	266½	268	269½	271	272½	274	275½	277	278½
.7	265½	267	268½	270	271½	273	274½	276	277½	279
.8	265½	267	269	270½	272	273½	275	276½	278	279½
.9	266	267½	269	270½	272½	274	275½	277	278½	280
64.0	266½	268	269½	271	272½	274	276	277½	279	280½
.1	267	268½	270	271½	273	274½	276	278	279½	281
.2	267½	269	270½	272	273½	275	276½	278	280	281½
.3	268	269½	271	272½	274	275½	277	278½	280	282
.4	268	270	271½	273	274½	276	277½	279	280½	282
.5	268½	270	271½	273½	275	276½	278	279½	281	282½
.6	269	270½	272	273½	275	277	278½	280	281½	283
.7	269½	271	272½	274	275½	277	279	280½	282	283½
.8	270	271½	273	274½	276	277½	279	281	282½	284
.9	270½	272	273½	275	276½	278	279½	281	283	284½
65.0	270½	272½	274	275½	277	278½	280	281½	283	285
.1	271	272½	274	276	277½	279	280½	282	283½	285½
.2	271½	273	274½	276	278	279½	281	282½	284	285½
.3	272	273½	275	276½	278	280	281½	283	284½	286
.4	272½	274	275½	277	278½	280	282	283½	285	286½
.5	273	274½	276	277½	279	280½	282	284	285½	287
.6	273	275	276½	278	279½	281	282½	284½	286	287½
.7	273½	275	277	278½	280	281½	283	284½	286½	288
.8	274	275½	277	279	280½	282	283½	285	286½	288½
.9	274½	276	277½	279	281	282½	284	285½	287	289
66.0	275	276½	278	279½	281	283	284½	286	287½	289
.1	275½	277	278½	280	281½	283	285	286½	288	289½
.2	275½	277½	279	280½	282	283½	285½	287	288½	290
.3	276	277½	279½	281	282½	284	285½	287½	289	290½
.4	276½	278	279½	281½	283	284½	286	287½	289½	291
.5	277	278½	280	281½	283½	285	286½	288	290	291½
.6	277½	279	280½	282	284	285½	287	288½	290	292
.7	278	279½	281	282½	284	286	287½	289	290½	292½
.8	278	280	281½	283	284½	286	288	289½	291	292½
.9	278½	280	282	283½	285	286½	288½	290	291½	293

Lengths.	35. MEAN DIAMETERS.									
	35.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
67.0.....	279	280½	282½	284	285½	287	288½	290½	292	293½
.1.....	279½	281	282½	284½	286	287½	289	291	292½	294
.2.....	280	281½	283	284½	286½	288	289½	291	293	294½
.3.....	280½	282	283½	285	286½	288½	290	291½	293½	295
.4.....	280½	282½	284	285½	287	289	290½	292	293½	295½
.5.....	281	282½	284½	286	287½	289	291	292½	294	296
.6.....	281½	283	285	286½	288	289½	291½	293	294½	296
.7.....	282	283½	285	287	288½	290	291½	293½	295	296½
.8.....	282½	284	285½	287	289	290½	292	294	295½	297
.9.....	283	284½	286	287½	289½	291	292½	294	296	297½
68.0.....	283	285	286½	288	289½	291½	293	294½	296½	298
.1.....	283½	285½	287	288½	290	292	293½	295	297	298½
.2.....	284	285½	287½	289	290½	292	294	295½	297	299
.3.....	284½	286	287½	289½	291	292½	294½	296	297½	299½
.4.....	285	286½	288	290	291½	293	294½	296½	298	299½
.5.....	285½	287	288½	290	292	293½	295	297	298½	300
.6.....	285½	287½	289	290½	292½	294	295½	297½	299	300½
.7.....	286	288	289½	291	292½	294½	296	297½	299½	301
.8.....	286½	288	290	291½	293	295	296½	298	300	301½
.9.....	287	288½	290½	292	293½	295	297	298½	300	302
69.0.....	287½	289	290½	292½	294	295½	297½	299	300½	302½
.1.....	288	289½	291	293	294½	296	298	299½	301	303
.2.....	288	290	291½	293	295	296½	298	300	301½	303
.3.....	288½	290½	292	293½	295½	297	298½	300½	302	303½
.4.....	289	290½	292½	294	295½	297½	299	300½	302½	304
.5.....	289½	291	293	294½	296	298	299½	301	303	304½
.6.....	290	291½	293	295	296½	298	300	301½	303½	305
.7.....	290½	292	293½	295½	297	298½	300½	302	303½	305½
.8.....	290½	292½	294	295½	297½	299	301	302½	304	306
.9.....	291	293	294½	296	298	299½	301	303	304½	306½
70.0.....	291½	293	295	296½	298½	300	301½	303½	305	306½
.1.....	292	293½	295½	297	298½	300½	302	304	305½	307
.2.....	292½	294	295½	297½	299	301	302½	304	306	307½
.3.....	293	294½	296	298	299½	301	303	304½	306½	308
.4.....	293	295	296½	298½	300	301½	303½	305	307	308½
.5.....	293½	295½	297	298½	300½	302	304	305½	307	309
.6.....	294	295½	297½	299	301	302½	304	306	307½	309½
.7.....	294½	296	298	299½	301	303	304½	306½	308	310
.8.....	295	296½	298½	300	301½	303½	305	307	308½	310
.9.....	295½	297	298½	300½	302	304	305½	307	309	310½

Lengths.	35. MEAN DIAMETERS.									
	35.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
71.0.....	295½	297½	299	301	302½	304	306	307½	309½	311
.1.....	296	298	299½	301	303	304½	306½	308	310	311½
.2.....	296½	298	300	301½	303½	305	307	308½	310½	312
.3.....	297	298½	300½	302	304	305½	307	309	310½	312½
.4.....	297½	299	301	302½	304	306	307½	309½	311	313
.5.....	298	299½	301	303	304½	306½	308	310	311½	313½
.6.....	298	300	301½	303½	305	307	308½	310½	312	313½
.7.....	298½	300½	302	304	305½	307	309	310½	312½	314
.8.....	299	300½	302½	304	306	307½	309½	311	313	314½
.9.....	299½	301	303	304½	306½	308	310	311½	313½	315
72.0.....	300	301½	303½	305	307	308½	310	312	313½	315½
.1.....	300½	302	303½	305½	307	309	310½	312½	314	316
.2.....	300½	302½	304	306	307½	309½	311	313	314½	316½
.3.....	301	303	304½	306½	308	310	311½	313½	315	317
.4.....	301½	303½	305	306½	308½	310	312	313½	315½	317½
.5.....	302	303½	305½	307	309	310½	312½	314	316	317½
.6.....	302½	304	306	307½	309½	311	313	314½	316½	318
.7.....	303	304½	306½	308	310	311½	313½	315	317	318½
.8.....	303	305	306½	308½	310	312	313½	315½	317	319
.9.....	303½	305½	307	309	310½	312½	314	316	317½	319½
73.0.....	304	306	307½	309½	311	313	314½	316½	318	320
.1.....	304½	306	308	309½	311½	313	315	317	318½	320½
.2.....	305	306½	308½	310	312	313½	315½	317	319	321
.3.....	305½	307	309	310½	312½	314	316	317½	319½	321
.4.....	305½	307½	309	311	312½	314½	316½	318	320	321½
.5.....	306	308	309½	311½	313	315	316½	318½	320½	322
.6.....	306½	308½	310	312	313½	315½	317	319	320½	322½
.7.....	307	308½	310½	312	314	316	317½	319½	321	323
.8.....	307½	309	311	312½	314½	316	318	320	321½	323½
.9.....	308	309½	311½	313	315	316½	318½	320	322	324
74.0.....	308	310	311½	313½	315½	317	319	320½	322½	324½
.1.....	308½	310½	312	314	315½	317½	319½	321	323	324½
.2.....	309	311	312½	314½	316	318	319½	321½	323½	325
.3.....	309½	311	313	315	316½	318½	320	322	324	325½
.4.....	310	311½	313½	315	317	319	320½	322½	324	326
.5.....	310½	312	314	315½	317½	319	321	323	324½	326½
.6.....	310½	312½	314½	316	318	319½	321½	323½	325	327
.7.....	311	313	314½	316½	318½	320	322	323½	325½	327½
.8.....	311½	313½	315	317	318½	320½	322½	324	326	328
.9.....	312	313½	315½	317½	319	321	322½	324½	326½	328

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
47.0	207	208½	209½	210½	211½	213	214	215	216½	217½
.1	207½	208½	210	211	212	213½	214½	215½	217	218
.2	208	209	210½	211½	212½	214	215	216	217½	218½
.3	208½	209½	210½	212	213	214½	215½	216½	218	219
.4	209	210	211	212½	213½	214½	216	217	218	219½
.5	209½	210½	211½	213	214	215	216½	217½	218½	220
.6	209½	211	212	213½	214½	215½	217	218	219	220½
.7	210	211½	212½	213½	215	216	217	218½	219½	221
.8	210½	212	213	214	215½	216½	217½	219	220	221½
.9	211	212	213½	214½	216	217	218	219½	220½	222
48.0	211½	212½	214	215	216	217½	218½	220	221	222
.1	212	213	214½	215½	216½	218	219	220½	221½	222½
.2	212½	213½	215	216	217	218½	219½	220½	222	223
.3	213	214	215	216½	217½	219	220	221	222½	223½
.4	213½	214½	215½	217	218	219	220½	221½	223	224
.5	213½	215	216	217½	218½	219½	221	222	223½	224½
.6	214	215½	216½	217½	219	220	221½	222½	224	225
.7	214½	216	217	218	219½	220½	222	223	224	225½
.8	215	216	217½	218½	220	221	222½	223½	224½	226
.9	215½	216½	218	219	220½	221½	222½	224	225	226½
49.0	216	217	218½	219½	220½	222	223	224½	225½	227
.1	216½	217½	219	220	221	222½	223½	225	226	227½
.2	217	218	219	220½	221½	223	224	225½	226½	228
.3	217	218½	219½	221	222	223½	224½	226	227	228
.4	217½	219	220	221½	222½	224	225	226	227½	228½
.5	218	219½	220½	222	223	224	225½	226½	228	229
.6	218½	220	221	222	223½	224½	226	227	228½	229½
.7	219	220	221½	222½	224	225	226½	227½	229	230
.8	219½	220½	222	223	224½	225½	227	228	229½	230½
.9	220	221	222½	223½	225	226	227½	228½	230	231
50.0	220½	221½	223	224	225	226½	227½	229	230	231½
.1	221	222	223	224½	225½	227	228	229½	230½	232
.2	221	222½	223½	225	226	227½	228½	230	231	232½
.3	221½	223	224	225½	226½	228	229	230½	231½	233
.4	222	223½	224½	226	227	228½	229½	231	232	233½
.5	222½	224	225	226	227½	228½	230	231½	232½	234
.6	223	224	225½	226½	228	229	230½	231½	233	234½
.7	223½	224½	226	227	228½	229½	231	232	233½	234½
.8	224	225	226½	227½	229	230	231½	232½	234	235
.9	224½	225½	227	228	229½	230½	232	233	234½	235½

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
51.0	224½	226	227	228½	229½	231	232½	233½	235	236
.1	225	226½	227½	229	230	231½	232½	234	235½	236½
.2	225½	227	228	229½	230½	232	233	234½	235½	237
.3	226	227½	228½	230	231	232½	233½	235	236	237½
.4	226½	227½	229	230½	231½	233	234	235½	236½	238
.5	227	228	229½	230½	232	233½	234½	236	237	238½
.6	227½	228½	230	231	232½	233½	235	236½	237½	239
.7	228	229	230½	231½	233	234	235½	237	238	239½
.8	228½	229½	231	232	233½	234½	236	237	238½	240
.9	228½	230	231	232½	234	235	236½	237½	239	240½
52.0	229	230½	231½	233	234½	235½	237	238	239½	240½
.1	229½	231	232	233½	234½	236	237½	238½	240	241
.2	230	231½	232½	234	235	236½	237½	239	240½	241½
.3	230½	231½	233	234½	235½	237	238	239½	241	242
.4	231	232	233½	235	236	237½	238½	240	241½	242½
.5	231½	232½	234	235	236½	238	239	240½	241½	243
.6	232	233	234½	235½	237	238½	239½	241	242	243½
.7	232	233½	235	236	237½	238½	240	241½	242½	244
.8	232½	234	235½	236½	238	239	240½	242	243	244½
.9	233	234½	235½	237	238½	239½	241	242½	243½	245
53.0	233½	235	236	237½	239	240	241½	242½	244	245½
.1	234	235½	236½	238	239	240½	242	243	244½	246
.2	234½	235½	237	238½	239½	241	242½	243½	245	246½
.3	235	236	237½	239	240	241½	243	244	245½	247
.4	235½	236½	238	239	240½	242	243	244½	246	247
.5	235½	237	238½	239½	241	242½	243½	245	246½	247½
.6	236	237½	239	240	241½	243	244	245½	247	248
.7	236½	238	239½	240½	242	243	244½	246	247½	248½
.8	237	238½	239½	241	242½	243½	245	246½	247½	249
.9	237½	239	240	241½	243	244	245½	247	248	249½
54.0	238	239½	240½	242	243½	244½	246	247½	248½	250
.1	238½	239½	241	242½	243½	245	246½	247½	249	250½
.2	239	240	241½	243	244	245½	247	248	249½	251
.3	239½	240½	242	243½	244½	246	247½	248½	250	251½
.4	239½	241	242½	243½	245	246½	248	249	250½	252
.5	240	241½	243	244	245½	247	248	249½	251	252½
.6	240½	242	243½	244½	246	247½	248½	250	251½	253
.7	241	242½	243½	245	246½	248	249	250½	252	253
.8	241½	243	244	245½	247	248	249½	251	252½	253½
.9	242	243½	244½	246	247½	248½	250	251½	253	254

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
55.0	242½	243½	245	246½	248	249	250½	252	253	254½
.1	243	244	245½	247	248	249½	251	252½	253½	255
.2	243	244½	246	247½	248½	250	251½	253	254	255½
.3	243½	245	246½	248	249	250½	252	253	254½	256
.4	244	245½	247	248	249½	251	252½	253½	255	256½
.5	244½	246	247½	248½	250	251½	253	254	255½	257
.6	245	246½	247½	249	250½	252	253	254½	256	257½
.7	245½	247	248	249½	251	252½	253½	255	256½	258
.8	246	247	248½	250	251½	253	254	255½	257	258½
.9	246½	247½	249	250½	252	253	254½	256	257½	259
56.0	247	248	249½	251	252½	253½	255	256½	258	259½
.1	247	248½	250	251½	252½	254	255½	257	258½	259½
.2	247½	249	250½	252	253	254½	256	257½	259	260
.3	248	249½	251	252	253½	255	256½	258	259	260½
.4	248½	250	251½	252½	254	255½	257	258½	259½	261
.5	249	250½	251½	253	254½	256	257½	258½	260	261½
.6	249½	251	252	253½	255	256½	258	259	260½	262
.7	250	251	252½	254	255½	257	258	259½	261	262½
.8	250½	251½	253	254½	256	257½	258½	260	261½	263
.9	250½	252	253½	255	256½	257½	259	260½	262	263½
57.0	251	252½	254	255½	257	258	259½	261	262½	264
.1	251½	253	254½	256	257	258½	260	261½	263	264½
.2	252	253½	255	256½	257½	259	260½	262	263½	265
.3	252½	254	255½	256½	258	259½	261	262½	264	265½
.4	253	254½	255½	257	258½	260	261½	263	264½	265½
.5	253½	255	256	257½	259	260½	262	263½	265	266
.6	254	255	256½	258	259½	261	262½	264	265	266½
.7	254	255½	257	258½	260	261½	263	264	265½	267
.8	254½	256	257½	259	260½	262	263½	264½	266	267½
.9	255	256½	258	259½	261	262½	263½	265	266½	268
58.0	255½	257	258½	260	261½	262½	264	265½	267	268½
.1	256	257½	259	260½	261½	263	264½	266	267½	269
.2	256½	258	259½	260½	262	263½	265	266½	268	269½
.3	257	258½	260	261	262½	264	265½	267	268½	270
.4	257½	259	260	261½	263	264½	266	267½	269	270½
.5	258	259	260½	262	263½	265	266½	268	269½	271
.6	258	259½	261	262½	264	265½	267	268½	270	271½
.7	258½	260	261½	263	264½	266	267½	269	270½	272
.8	259	260½	262	263½	265	266½	268	269½	270½	272
.9	259½	261	262½	264	265½	267	268½	269½	271	272½

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
59.0	260	261½	263	264½	266	267	268½	270	271½	273
.1	260½	262	263½	265	266	267½	269	270½	272	273½
.2	261	262½	264	265	266½	268	269½	271	272½	274
.3	261½	263	264	265½	267	268½	270	271½	273	274½
.4	261½	263	264½	266	267½	269	270½	272	273½	275
.5	262	263½	265	266½	268	269½	271	272½	274	275½
.6	262½	264	265½	267	268½	270	271½	273	274½	276
.7	263	264½	266	267½	269	270½	272	273½	275	276½
.8	263½	265	266½	268	269½	271	272½	274	275½	277
.9	264	265½	267	268½	270	271½	273	274½	276	277½
60.0	264½	266	267½	269	270½	272	273½	275	276½	278
.1	265	266½	268	269½	270½	272	273½	275	276½	278
.2	265½	266½	268	269½	271	272½	274	275½	277	278½
.3	265½	267	268½	270	271½	273	274½	276	277½	279
.4	266	267½	269	270½	272	273½	275	276½	278	279½
.5	266½	268	269½	271	272½	274	275½	277	278½	280
.6	267	268½	270	271½	273	274½	276	277½	279	280½
.7	267½	269	270½	272	273½	275	276½	278	279½	281
.8	268	269½	271	272½	274	275½	277	278½	280	281½
.9	268½	270	271½	273	274½	276	277½	279	280½	282
61.0	269	270½	272	273½	275	276½	278	279½	281	282½
.1	269	270½	272	273½	275	277	278½	280	281½	283
.2	269½	271	272½	274	275½	277	278½	280½	282	283½
.3	270	271½	273	274½	276	277½	279	280½	282½	284
.4	270½	272	273½	275	276½	278	279½	281	282½	284
.5	271	272½	274	275½	277	278½	280	281½	283	284½
.6	271½	273	274½	276	277½	279	280½	282	283½	285
.7	272	273½	275	276½	278	279½	281	282½	284	285½
.8	272½	274	275½	277	278½	280	281½	283	284½	286
.9	273	274½	276	277½	279	280½	282	283½	285	286½
62.0	273	274½	276	278	279½	281	282½	284	285½	287
.1	273½	275	276½	278	280	281½	283	284½	286	287½
.2	274	275½	277	278½	280	281½	283½	285	286½	288
.3	274½	276	277½	279	280½	282	283½	285½	287	288½
.4	275	276½	278	279½	281	282½	284	286	287½	289
.5	275½	277	278½	280	281½	283	284½	286	288	289½
.6	276	277½	279	280½	282	283½	285	286½	288	290
.7	276½	278	279½	281	282½	284	285½	287	288½	290½
.8	276½	278½	280	281½	283	284½	286	287½	289	290½
.9	277	278½	280½	282	283½	285	286½	288	289½	291

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
63.0	277½	279	280½	282	284	285½	287	288½	290	291½
.1	278	279½	281	282½	284½	286	287½	289	290½	292
.2	278½	280	281½	283	284½	286½	288	289½	291	292½
.3	279	280½	282	283½	285	286½	288½	290	291½	293
.4	279½	281	282½	284	285½	287	289	290½	292	293½
.5	280	281½	283	284½	286	287½	289	291	292½	294
.6	280	282	283½	285	286½	288	289½	291½	293	294½
.7	280½	282	284	285½	287	288½	290	291½	293½	295
.8	281	282½	284½	286	287½	289	290½	292	294	295½
.9	281½	283	284½	286½	288	289½	291	292½	294	296
64.0	282	283½	285	286½	288½	290	291½	293	294½	296½
.1	282½	284	285½	287	289	290½	292	293½	295	296½
.2	283	284½	286	287½	289	291	292½	294	295½	297
.3	283½	285	286½	288	289½	291½	293	294½	296	297½
.4	284	285½	287	288½	290	291½	293½	295	296½	298
.5	284	286	287½	289	290½	292	294	295½	297	298½
.6	284½	286	288	289½	291	292½	294	296	297½	299
.7	285	286½	288½	290	291½	293	294½	296½	298	299½
.8	285½	287	288½	290½	292	293½	295	296½	298½	300
.9	286	287½	289	291	292½	294	295½	297	299	300½
65.0	286½	288	289½	291	293	294½	296	297½	299½	301
.1	287	288½	290	291½	293½	295	296½	298	299½	301½
.2	287½	289	290½	292	293½	295½	297	298½	300	302
.3	287½	289½	291	292½	294	296	297½	299	300½	302½
.4	288	290	291½	293	294½	296	298	299½	301	303
.5	288½	290	292	293½	295	296½	298½	300	301½	303
.6	289	290½	292½	294	295½	297	299	300½	302	303½
.7	289½	291	292½	294½	296	297½	299	301	302½	304
.8	290	291½	293	295	296½	298	299½	301½	303	304½
.9	290½	292	293½	295	297	298½	300	302	303½	305
66.0	291	292½	294	295½	297½	299	300½	302	304	305½
.1	291½	293	294½	296	298	299½	301	302½	304½	306
.2	291½	293½	295	296½	298	300	301½	303	305	306½
.3	292	294	295½	297	298½	300½	302	303½	305½	307
.4	292½	294	296	297½	299	301	302½	304	305½	307½
.5	293	294½	296½	298	299½	301	303	304½	306	308
.6	293½	295	296½	298½	300	301½	303½	305	306½	308½
.7	294	295½	297	299	300½	302	304	305½	307	309
.8	294½	296	297½	299½	301	302½	304	306	307½	309
.9	295	296½	298	299½	301½	303	304½	306½	308	309½

Lengths.	36. MEAN DIAMETERS.									
	36.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
67.0	295	297	298½	300	302	303½	305	307	308½	310
.1	295½	297½	299	300½	302½	304	305½	307½	309	310½
.2	296	298	299½	301	302½	304½	306	307½	309½	311
.3	296½	298	300	301½	303	305	306½	308	310	311½
.4	297	298½	300½	302	303½	305½	307	308½	310½	312
.5	297½	299	300½	302½	304	306	307½	309	311	312½
.6	298	299½	301	303	304½	306	308	309½	311½	313
.7	298½	300	301½	303½	305	306½	308½	310	311½	313½
.8	299	300½	302	304	305½	307	309	310½	312	314
.9	299	301	302½	304	306	307½	309½	311	312½	314½
68.0	299½	301½	303	304½	306½	308	309½	311½	313	315
.1	300	301½	303½	305	307	308½	310	312	313½	315½
.2	300½	302	304	305½	307	309	310½	312½	314	315½
.3	301	302½	304½	306	307½	309½	311	313	314½	316
.4	301½	303	305	306½	308	310	311½	313	315	316½
.5	302	303½	305	307	308½	310½	312	313½	315½	317
.6	302½	304	305½	307½	309	310½	312½	314	316	317½
.7	302½	304½	306	308	309½	311	313	314½	316½	318
.8	303	305	306½	308	310	311½	313½	315	317	318½
.9	303½	305½	307	308½	310½	312	314	315½	317	319
69.0	304	305½	307½	309	311	312½	314½	316	317½	319½
.1	304½	306	308	309½	311½	313	314½	316½	318	320
.2	305	306½	308½	310	311½	313½	315	317	318½	320½
.3	305½	307	309	310½	312	314	315½	317½	319	321
.4	306	307½	309	311	312½	314½	316	318	319½	321½
.5	306	308	309½	311½	313	315	316½	318½	320	321½
.6	306½	308½	310	312	313½	315½	317	318½	320½	322
.7	307	309	310½	312½	314	315½	317½	319	321	322½
.8	307½	309½	311	312½	314½	316	318	319½	321½	323
.9	308	309½	311½	313	315	316½	318½	320	322	323½
70.0	308½	310	312	313½	315½	317	319	320½	322½	324
.1	309	310½	312½	314	316	317½	319½	321	323	324½
.2	309½	311	313	314½	316	318	319½	321½	323	325
.3	310	311½	313	315	316½	318½	320	322	323½	325½
.4	310	312	313½	315½	317	319	320½	322½	324	326
.5	310½	312½	314	316	317½	319½	321	323	324½	326½
.6	311	313	314½	316½	318	320	321½	323½	325	327
.7	311½	313½	315	316½	318½	320	322	324	325½	327½
.8	312	313½	315½	317	319	320½	322½	324	326	328
.9	312½	314	316	317½	319½	321	323	324½	326½	328

Lengths.	37. MEAN DIAMETERS.									
	37.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
50.0	232½	234	235½	236½	238	239	240½	241½	243	244
.1	233	234½	235½	237	238½	239½	241	242	243½	244½
.2	233½	235	236	237½	238½	240	241½	242½	244	245
.3	234	235½	236½	238	239	240½	242	243	244½	245½
.4	234½	236	237	238½	239½	241	242½	243½	245	246
.5	235	236½	237½	239	240	241½	242½	244	245½	246½
.6	235½	237	238	239½	240½	242	243	244½	246	247
.7	236	237½	238½	240	241	242½	243½	245	246½	247½
.8	236½	237½	239	240½	241½	243	244	245½	247	248
.9	237	238	239½	241	242	243½	244½	246	247½	248½
51.0	237½	238½	240	241	242½	244	245	246½	248	249
.1	238	239	240½	241½	243	244½	245½	247	248	249½
.2	238½	239½	241	242	243½	245	246	247½	248½	250
.3	239	240	241½	242½	244	245½	246½	248	249	250½
.4	239	240½	242	243	244½	246	247	248½	249½	251
.5	239½	241	242½	243½	245	246	247½	249	250	251½
.6	240	241½	243	244	245½	246½	248	249½	250½	252
.7	240½	242	243½	244½	246	247	248½	250	251	252½
.8	241	242½	243½	245	246½	247½	249	250½	251½	253
.9	241½	243	244	245½	247	248	249½	251	252	253½
52.0	242	243½	244½	246	247½	248½	250	251½	252½	254
.1	242½	244	245	246½	248	249	250½	252	253	254½
.2	243	244½	245½	247	248½	249½	251	252½	253½	255
.3	243½	245	246	247½	248½	250	251½	252½	254	255½
.4	244	245	246½	248	249	250½	252	253	254½	256
.5	244½	245½	247	248½	249½	251	252½	253½	255	256½
.6	245	246	247½	249	250	251½	253	254	255½	257
.7	245½	246½	248	249½	250½	252	253½	254½	256	257½
.8	246	247	248½	250	251	252½	254	255	256½	258
.9	246	247½	249	250	251½	253	254½	255½	257	258½
53.0	246½	248	249½	250½	252	253½	255	256	257½	259
.1	247	248½	250	251	252½	254	255	256½	258	259½
.2	247½	249	250½	251½	253	254½	255½	257	258½	260
.3	248	249½	251	252	253½	255	256	257½	259	260½
.4	248½	250	251	252½	254	255½	256½	258	259½	261
.5	249	250½	251½	253	254½	256	257	258½	260	261½
.6	249½	251	252	253½	255	256½	257½	259	260½	262
.7	250	251½	252½	254	255½	257	258	259½	261	262½
.8	250½	252	253	254½	256	257	258½	260	261½	262½
9	251	252	253½	255	256½	257½	259	260½	262	263

Lengths.	37. MEAN DIAMETERS.									
	37.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
54.0	251½	252½	254	255½	257	258	259½	261	262½	263½
.1	252	253	254½	256	257½	258½	260	261½	263	264
.2	252½	253½	255	256½	258	259	260½	262	263½	264½
.3	252½	254	255½	257	258	259½	261	262½	264	265
.4	253	254½	256	257½	258½	260	261½	263	264½	265½
.5	253½	255	256½	258	259	260½	262	263½	265	266
.6	254	255½	257	258½	259½	261	262½	264	265	266½
.7	254½	256	257½	259	260	261½	263	264½	265½	267
.8	255	256½	258	259	260½	262	263½	265	266	267½
.9	255½	257	258½	259½	261	262½	264	265½	266½	268
55.0	256	257½	259	260	261½	263	264½	266	267	268½
.1	256½	258	259	260½	262	263½	265	266½	267½	269
.2	257	258½	259½	261	262½	264	265½	266½	268	269½
.3	257½	259	260	261½	263	264½	266	267	268½	270
.4	258	259½	260½	262	263½	265	266½	267½	269	270½
.5	258½	259½	261	262½	264	265½	267	268	269½	271
.6	259	260	261½	263	264½	266	267½	268½	270	271½
.7	259½	260½	262	263½	265	266½	267½	269	270½	272
.8	259½	261	262½	264	265½	267	268	269½	271	272½
.9	260	261½	263	264½	266	267½	268½	270	271½	273
56.0	260½	262	263½	265	266½	268	269	270½	272	273½
.1	261	262½	264	265½	267	268	269½	271	272½	274
.2	261½	263	264½	266	267½	268½	270	271½	273	274½
.3	262	263½	265	266½	268	269	270½	272	273½	275
.4	262½	264	265½	267	268	269½	271	272½	274	275½
.5	263	264½	266	267½	268½	270	271½	273	274½	276
.6	263½	265	266½	267½	269	270½	272	273½	275	276½
.7	264	265½	267	268	269½	271	272½	274	275½	277
.8	264½	266	267	268½	270	271½	273	274½	276	277½
.9	265	266½	267½	269	270½	272	273½	275	276½	278
57.0	265½	266½	268	269½	271	272½	274	275½	277	278½
.1	266	267	268½	270	271½	273	274½	276	277½	279
.2	266	267½	269	270½	272	273½	275	276½	278	279½
.3	266½	268	269½	271	272½	274	275½	277	278½	280
.4	267	268½	270	271½	273	274½	276	277½	279	280½
.5	267½	269	270½	272	273½	275	276½	278	279½	281
.6	268	269½	271	272½	274	275½	277	278½	280	281½
.7	268½	270	271½	273	274½	276	277½	279	280½	282
.8	269	270½	272	273½	275	276½	278	279½	281	282½
.9	269½	271	272½	274	275½	277	278½	280	281½	283

Lengths.	37. MEAN DIAMETERS.									
	37.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
58.0	270	271½	273	274½	276	277½	279	280½	282	283½
.1	270½	272	273½	275	276½	278	279½	281	282½	283½
.2	271	272½	274	275½	277	278½	280	281	282½	284
.3	271½	273	274½	276	277½	278½	280	281½	283	284½
.4	272	273½	275	276½	277½	279	280½	282	283½	285
.5	272½	274	275	276½	278	279½	281	282½	284	285½
.6	273	274	275½	277	278½	280	281½	283	284½	286
.7	273	274½	276	277½	279	280½	282	283½	285	286½
.8	273½	275	276½	278	279½	281	282½	284	285½	287
.9	274	275½	277	278½	280	281½	283	284½	286	287½
59.0	274½	276	277½	279	280½	282	283½	285	286½	288
.1	275	276½	278	279½	281	282½	284	285½	287	288½
.2	275½	277	278½	280	281½	283	284½	286	287½	289
.3	276	277½	279	280½	282	283½	285	286½	288	289½
.4	276½	278	279½	281	282½	284	285½	287	288½	290
.5	277	278½	280	281½	283	284½	286	287½	289	290½
.6	277½	279	280½	282	283½	285	286½	288	289½	291
.7	278	279½	281	282½	284	285½	287	288½	290	291½
.8	278½	280	281½	283	284½	286	287½	289	290½	292
.9	279	280½	282	283½	285	286½	288	289½	291	292½
60.0	279½	281	282½	284	285½	287	288½	290	291½	293
.1	279½	281½	283	284½	286	287½	289	290½	292	293½
.2	280	281½	283	285	286½	288	289½	291	292½	294
.3	280½	282	283½	285	287	288½	290	291½	293	294½
.4	281	282½	284	285½	287	289	290½	292	293½	295
.5	281½	283	284½	286	287½	289½	291	292½	294	295½
.6	282	283½	285	286½	288	289½	291½	293	294½	296
.7	282½	284	285½	287	288½	290	292	293½	295	296½
.8	283	284½	286	287½	289	290½	292½	294	295½	297
.9	283½	285	286½	288	289½	291	292½	294½	296	297½
61.0	284	285½	287	288½	290	291½	293	295	296½	298
.1	284½	286	287½	289	290½	292	293½	295½	297	298½
.2	285	286½	288	289½	291	292½	294	295½	297½	299
.3	285½	287	288½	290	291½	293	294½	296	298	299½
.4	286	287½	289	290½	292	293½	295	296½	298½	300
.5	286½	288	289½	291	292½	294	295½	297	299	300½
.6	286½	288½	290	291½	293	294½	296	297½	299½	301
.7	287	288½	290½	292	293½	295	296½	298	299½	301½
.8	287½	289	291	292½	294	295½	297	298½	300	302
.9	288	289½	291	293	294½	296	297½	299	300½	302½

Lengths.	37. MEAN DIAMETERS.									
	37.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
62.0	288½	290	291½	293½	295	296½	298	299½	301	303
.1	289	290½	292	294	295½	297	298½	300	301½	303½
.2	289½	291	292½	294	296	297½	299	300½	302	304
.3	290	291½	293	294½	296½	298	299½	301	302½	304½
.4	290½	292	293½	295	297	298½	300	301½	303	304½
.5	291	292½	294	295½	297	299	300½	302	303½	305
.6	291½	293	294½	296	297½	299½	301	302½	304	305½
.7	292	293½	295	296½	298	300	301½	303	304½	306
.8	292½	294	295½	297	298½	300½	302	303½	305	306½
.9	293	294½	296	297½	299	300½	302½	304	305½	307
63.0	293	295	296½	298	299½	301	303	304½	306	307½
.1	293½	295½	297	298½	300	301½	303½	305	306½	308
.2	294	296	297½	299	300½	302	304	305½	307	308½
.3	294½	296	298	299½	301	302½	304½	306	307½	309
.4	295	296½	298½	300	301½	303	305	306½	308	309½
.5	295½	297	299	300½	302	303½	305	307	308½	310
.6	296	297½	299	301	302½	304	305½	307½	309	310½
.7	296½	298	299½	301½	303	304½	306	308	309½	311
.8	297	298½	300	302	303½	305	306½	308½	310	311½
.9	297½	299	300½	302½	304	305½	307	309	310½	312
64.0	298	299½	301	302½	304½	306	307½	309½	311	312½
.1	298½	300	301½	303	305	306½	308	310	311½	313
.2	299	300½	302	303½	305½	307	308½	310	312	313½
.3	299½	301	302½	304	306	307½	309	310½	312½	314
.4	300	301½	303	304½	306½	308	309½	311	313	314½
.5	300	302	303½	305	306½	308½	310	311½	313½	315
.6	300½	302½	304	305½	307	309	310½	312	314	315½
.7	301	303	304½	306	307½	309½	311	312½	314½	316
.8	301½	303½	305	306½	308	310	311½	313	315	316½
.9	302	303½	305½	307	308½	310½	312	313½	315½	317
65.0	302½	304	306	307½	309	311	312½	314	316	317½
.1	303	304½	306½	308	309½	311½	313	314½	316½	318
.2	303½	305	307	308½	310	311½	313½	315	316½	318½
.3	304	305½	307	309	310½	312	314	315½	317	319
.4	304½	306	307½	309½	311	312½	314½	316	317½	319½
.5	305	306½	308	310	311½	313	315	316½	318	320
.6	305½	307	308½	310½	312	313½	315½	317	318½	320½
.7	306	307½	309	311	312½	314	316	317½	319	321
.8	306½	308	309½	311½	313	314½	316½	318	319½	321½
.9	306½	308½	310	311½	313½	315	317	318½	320	322

Lengths.	37. MEAN DIAMETERS.									
	37.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
66.0	307	309	310½	312	314	315½	317	319	320½	322½
.1	307½	309½	311	312½	314½	316	317½	319½	321	323
.2	308	310	311½	313	315	316½	318	320	321½	323½
.3	308½	310½	312	313½	315½	317	318½	320½	322	324
.4	309	310½	312½	314	316	317½	319	321	322½	324½
.5	309½	311	313	314½	316½	318	319½	321½	323	325
.6	310	311½	313½	315	316½	318½	320	322	323½	325½
.7	310½	312	314	315½	317	319	320½	322½	324	325½
.8	311	312½	314½	316	317½	319½	321	323	324½	326
.9	311½	313	315	316½	318	320	321½	323½	325	326½
67.0	312	313½	315	317	318½	320½	322	324	325½	327
.1	312½	314	315½	317½	319	321	322½	324½	326	327½
.2	313	314½	316	318	319½	321½	323	324½	326½	328
.3	313½	315	316½	318½	320	322	323½	325	327	328½
.4	313½	315½	317	319	320½	322½	324	325½	327½	329
.5	314	316	317½	319½	321	322½	324½	326	328	329½
.6	314½	316½	318	320	321½	323	325	326½	328½	330
.7	315	317	318½	320	322	323½	325½	327	329	330½
.8	315½	317½	319	320½	322½	324	326	327½	329½	331
.9	316	318	319½	321	323	324½	326½	328	330	331½
68.0	316½	318	320	321½	323½	325	327	328½	330½	332
.1	317	318½	320½	322	324	325½	327½	329	331	332½
.2	317½	319	321	322½	324½	326	328	329½	331½	333
.3	318	319½	321½	323	325	326½	328½	330	332	333½
.4	318½	320	322	323½	325½	327	329	330½	332½	334
.5	319	320½	322½	324	326	327½	329½	331	333	334½
.6	319½	321	323	324½	326	328	329½	331½	333½	335
.7	320	321½	323	325	326½	328½	330	332	333½	335½
.8	320	322	323½	325½	327	329	330½	332½	334	336
.9	320½	322½	324	326	327½	329½	331	333	334½	336½
69.0	321	323	324½	326½	328	330	331½	333½	335	337
.1	321½	323½	325	327	328½	330½	332	334	335½	337½
.2	322	324	325½	327½	329	331	332½	334½	336	338
.3	322½	324½	326	328	329½	331½	333	335	336½	338½
.4	323	325	326½	328½	330	332	333½	335½	337	339
.5	323½	325	327	329	330½	332½	334	336	337½	339½
.6	324	325½	327½	329	331	333	334½	336½	338	340
.7	324½	326	328	329½	331½	333½	335	337	338½	340½
.8	325	326½	328½	330	332	333½	335½	337½	339	341
.9	325½	327	329	330½	332½	334	336	338	339½	341½

Lengths.	37. MEAN DIAMETERS.									
	37.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
70.0	326	327½	329½	331	333	334½	336½	338½	340	342
.1	326½	328	330	331½	333½	335	337	339	340½	342½
.2	327	328½	330½	332	334	335½	337½	339	341	343
.3	327	329	331	332½	334½	336	338	339½	341½	343½
.4	327½	329½	331	333	335	336½	338½	340	342	344
.5	328	330	331½	333½	335½	337	339	340½	342½	344½
.6	328½	330½	332	334	336	337½	339½	341	343	345
.7	329	331	332½	334½	336	338	340	341½	343½	345½
.8	329½	331½	333	335	336½	338½	340½	342	344	346
.9	330	332	333½	335½	337	339	341	342½	344½	346½
71.0	330½	332½	334	336	337½	339½	341½	343	345	346½
.1	331	332½	334½	336½	338	340	342	343½	345½	347
.2	331½	333	335	337	338½	340½	342	344	346	347½
.3	332	333½	335½	337½	339	341	342½	344½	346½	348
.4	332½	334	336	337½	339½	341½	343	345	347	348½
.5	333	334½	336½	338	340	342	343½	345½	347½	349
.6	333½	335	337	338½	340½	342½	344	346	348	349½
.7	333½	335½	337½	339	341	343	344½	346½	348½	350
.8	334	336	338	339½	341½	343½	345	347	349	350½
.9	334½	336½	338½	340	342	344	345½	347½	349½	351

Lengths.	38. MEAN DIAMETERS.									
	38.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
55.0	270	271½	273	274½	275½	277	278½	280	281½	283
.1	270½	272	273½	275	276	277½	279	280½	282	283½
.2	271	272½	274	275½	276½	278	279½	281	282½	284
.3	271½	273	274½	276	277	278½	280	281½	283	284½
.4	272	273½	275	276½	277½	279	280½	282	283½	285
.5	272½	274	275½	277	278	279½	281	282½	284	285½
.6	273	274½	276	277½	279	280	281½	283	284½	286
.7	273½	275	276½	278	279½	280½	282	283½	285	286½
.8	274	275½	277	278½	280	281	282½	284	285½	287
.9	274½	276	277½	279	280½	281½	283	284½	286	287½
56.0	275	276½	278	279½	281	282	283½	285	286½	288
.1	275½	277	278½	280	281½	282½	284	285½	287	288½
.2	276	277½	279	280½	282	283	284½	286	287½	289
.3	276½	278	279½	281	282½	283½	285	286½	288	289½
.4	277	278½	280	281½	283	284	285½	287	288½	290
.5	277½	279	280½	282	283½	284½	286	287½	289	290½
.6	278	279½	281	282½	284	285	286½	288	289½	291
.7	278½	280	281½	283	284½	285½	287	288½	290	291½
.8	279	280½	282	283½	285	286½	287½	289	290½	292
.9	279½	281	282½	284	285½	287	288	289½	291	292½

Lengths.	38. MEAN DIAMETERS.									
	38.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
57.0	280	281½	283	284½	286	287½	289	290½	292	293½
.1	280½	282	283½	285	286½	288	289½	291	292½	294
.2	281	282½	284	285½	287	288½	290	291½	293	294½
.3	281½	283	284½	286	287½	289	290½	292	293½	295
.4	282	283½	285	286½	288	289½	291	292½	294	295½
.5	282½	284	285½	287	288½	290	291½	293	294½	296
.6	283	284½	286	287½	289	290½	292	293½	295	296½
.7	283½	285	286½	288	289½	291	292½	294	295½	297
.8	284	285½	287	288½	290	291½	293	294½	296	297½
.9	284½	286	287½	289	290½	292	293½	295	296½	298
58.0	285	286½	288	289½	291	292½	294	295½	297	298½
.1	285	287	288½	290	291½	293	294½	296	297½	299
.2	285½	287	289	290½	292	293½	295	296½	298	299½
.3	286	287½	289½	291	292½	294	295½	297	298½	300
.4	286½	288	289½	291½	293	294½	296	297½	299	300½
.5	287	288½	290	292	293½	295	296½	298	299½	301
.6	287½	289	290½	292½	294	295½	297	298½	300	301½
.7	288	289½	291	293	294½	296	297½	299	300½	302
.8	288½	290	291½	293½	295	296½	298	299½	301	302½
.9	289	290½	292	294	295½	297	298½	300	301½	303
59.0	289½	291	292½	294½	296	297½	299	300½	302	303½
.1	290	291½	293	295	296½	298	299½	301	302½	304
.2	290½	292	293½	295½	297	298½	300	301½	303	304½
.3	291	292½	294	296	297½	299	300½	302	303½	305
.4	291½	293	294½	296½	298	299½	301	302½	304	305½
.5	292	293½	295	297	298½	300	301½	303	304½	306
.6	292½	294	295½	297½	299	300½	302	303½	305	306½
.7	293	294½	296	297½	299½	301	302½	304	305½	307
.8	293½	295	296½	298	300	301½	303	304½	306	307½
.9	294	295½	297	298½	300½	302	303½	305	306½	308
60.0	294½	296	297½	299	301	302½	304	305½	307	308½
.1	295	296½	298	299½	301½	303	304½	306	307½	309
.2	295½	297	298½	300	302	303½	305	306½	308	309½
.3	296	297½	299	300½	302½	304	305½	307	308½	310
.4	296½	298	299½	301	303	304½	306	307½	309	311
.5	297	298½	300	301½	303½	305	306½	308	309½	311½
.6	297½	299	300½	302	304	305½	307	308½	310	312
.7	298	299½	301	302½	304½	306	307½	309	310½	312½
.8	298½	300	301½	303	305	306½	308	309½	311	313
.9	299	300½	302	303½	305½	307	308½	310	311½	313½

Lengths.	38. MEAN DIAMETERS.									
	38.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
61.0	299½	301	302½	304	306	307½	309	310½	312	314
.1	300	301½	303	304½	306½	308	309½	311	312½	314½
.2	300½	302	303½	305	307	308½	310	311½	313½	315
.3	301	302½	304	305½	307½	309	310½	312	314	315½
.4	301½	303	304½	306	308	309½	311	312½	314½	316
5	302	303½	305	306½	308½	310	311½	313	315	316½
6	302½	304	305½	307	309	310½	312	313½	315½	317
.7	303	304½	306	307½	309½	311	312½	314	316	317½
.8	303½	305	306½	308	310	311½	313	314½	316½	318
.9	304	305½	307	308½	310½	312	313½	315	317	318½
62.0	304½	306	307½	309	311	312½	314	315½	317½	319
.1	305	306½	308	309½	311½	313	314½	316	318	319½
.2	305½	307	308½	310	312	313½	315	316½	318½	320
.3	306	307½	309	310½	312½	314	315½	317	319	320½
.4	306½	308	309½	311	313	314½	316	317½	319½	321
.5	307	308½	310	311½	313½	315	316½	318½	320	321½
.6	307½	309	310½	312	314	315½	317	319	320½	322
.7	308	309½	311	312½	314½	316	317½	319½	321	322½
.8	308½	310	311½	313	315	316½	318	320	321½	323
.9	309	310½	312	313½	315½	317	318½	320½	322	323½
63.0	309½	311	312½	314	316	317½	319	321	322½	324
.1	310	311½	313	314½	316½	318	319½	321½	323	324½
.2	310½	312	313½	315	317	318½	320	322	323½	325
.3	311	312½	314	315½	317½	319	320½	322½	324	325½
.4	311½	313	314½	316	318	319½	321	323	324½	326
.5	312	313½	315	316½	318½	320	321½	323½	325	326½
.6	312½	314	315½	317	319	320½	322	324	325½	327
.7	312½	314½	316	317½	319½	321	322½	324½	326	327½
.8	313	315	316½	318	320	321½	323	325	326½	328
.9	313½	315½	317	318½	320½	322	323½	325½	327	329
64.0	314	316	317½	319	321	322½	324	326	327½	329½
.1	314½	316½	318	319½	321½	323	324½	326½	328	330
.2	315	317	318½	320	322	323½	325	327	328½	330½
.3	315½	317½	319	320½	322½	324	325½	327½	329	331
.4	316	318	319½	321	323	324½	326	328	329½	331½
.5	316½	318½	320	321½	323½	325	326½	328½	330	332
.6	317	319	320½	322	324	325½	327½	329	330½	332½
.7	317½	319½	321	322½	324½	326	328	329½	331	333
.8	318	320	321½	323	325	326½	328½	330	331½	333½
.9	318½	320½	322	323½	325½	327	329	330½	332	334

Lengths.	38. MEAN DIAMETERS.									
	38.0	**.1**	**.2**	**.3**	**.4**	**.5**	**.6**	**.7**	**.8**	**.9**
65.0	319	321	322½	324	326	327½	329½	331	332½	334½
.1	319½	321½	323	324½	326½	328	330	331½	333	335
.2	320	322	323½	325	327	328½	330½	332	333½	335½
.3	320½	322½	324	325½	327½	329	331	332½	334	336
.4	321	323	324½	326	328	329½	331½	333	334½	336½
.5	321½	323½	325	326½	328½	330	332	333½	335½	337
.6	322	324	325½	327	329	330½	332½	334	336	337½
.7	322½	324½	326	327½	329½	331	333	334½	336½	338
.8	323	325	326½	328	330	331½	333½	335	337	338½
.9	323½	325	327	328½	330½	332	334	335½	337½	339
66.0	324	325½	327½	329	331	332½	334½	336	338	339½
.1	324½	326	328	329½	331½	333	335	336½	338½	340
.2	325	326½	328½	330	332	333½	335½	337	339	340½
.3	325½	327	329	330½	332½	334	336	337½	339½	341
.4	326	327½	329½	331	333	334½	336½	338	340	341½
.5	326½	328	330	331½	333½	335	337	338½	340½	342
.6	327	328½	330½	332	334	335½	337½	339	341	342½
.7	327½	329	331	332½	334½	336	338	339½	341½	343
.8	328	329½	331½	333	335	336½	338½	340	342	343½
.9	328½	330	332	333½	335½	337	339	340½	342½	344
67.0	329	330½	332½	334	336	337½	339½	341	343	344½
.1	329½	331	333	334½	336½	338	340	341½	343½	345
.2	330	331½	333½	335	337	338½	340½	342	344	345½
.3	330½	332	334	335½	337½	339	341	342½	344½	346½
.4	331	332½	334½	336	338	339½	341½	343	345	347
.5	331½	333	335	336½	338½	340	342	343½	345½	347½
.6	332	333½	335½	337	339	340½	342½	344	346	348
.7	332½	334	336	337½	339½	341	343	344½	346½	348½
.8	333	334½	336½	338	340	341½	343½	345	347	349
.9	333½	335	337	338½	340½	342	344	346	347½	349½
68.0	334	335½	337½	339	341	342½	344½	346½	348	350
.1	334½	336	338	339½	341½	343	345	347	348½	350½
.2	335	336½	338½	340	342	343½	345½	347½	349	351
.3	335½	337	339	340½	342½	344	346	348	349½	351½
.4	336	337½	339½	341	343	344½	346½	348½	350	352
.5	336½	338	340	341½	343½	345	347	349	350½	352½
.6	337	338½	340½	342	344	345½	347½	349½	351	353
.7	337½	339	341	342½	344½	346	348	350	351½	353½
.8	338	339½	341½	343	345	346½	348½	350½	352	354
.9	338½	340	342	343½	345½	347	349	351	352½	354½

Lengths.	38. MEAN DIAMETERS.									
	38.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
69.0.....	339	340½	342½	344	346	347½	349½	351½	353	355
.1.....	339½	341	343	344½	346½	348	350	352	353½	355½
.2.....	339½	341½	343½	345	347	348½	350½	352½	354	356
.3.....	340	342	344	345½	347½	349	351	353	354½	356½
.4.....	340½	342½	344½	346	348	350	351½	353½	355	357
.5.....	341	343	345	346½	348½	350½	352	354	355½	357½
.6.....	341½	343½	345½	347	349	351	352½	354½	356	358
.7.....	342	344	346	347½	349½	351½	353	355	357	358½
.8.....	342½	344½	346½	348	350	352	353½	355½	357½	359
.9.....	343	345	347	348½	350½	352½	354	356	358	359½
70.0.....	343½	345½	347½	349	351	353	354½	356½	358½	360
.1.....	344	346	348	349½	351	353½	355	357	359	360½
.2.....	344½	346½	348½	350	352	354	355½	357½	359½	361
.3.....	345	347	349	350½	352½	354½	356	358	360	361½
.4.....	345½	347½	349½	351	353	355	356½	358½	360½	362
.5.....	346	348	350	351½	353½	355½	357	359	361	362½
.6.....	346½	348½	350½	352	354	356	357½	359½	361½	363
.7.....	347	349	351	352½	354½	356½	358	360	362	363½
.8.....	347½	349½	351½	353	355	357	358½	360½	362½	364½
.9.....	348	350	352	353½	355½	357½	359	361	363	365
71.0.....	348½	350½	352½	354	356	358	359½	361½	363½	365½
.1.....	349	351	353	354½	356½	358½	360	362	364	366
.2.....	349½	351½	353½	355	357	359	360½	362½	364½	366½
.3.....	350	352	353½	355½	357½	359½	361	363	365	367
.4.....	350½	352½	354	356	358	360	361½	363½	365½	367½
.5.....	351	353	354½	356½	358½	360½	362	364	366	368
.6.....	351½	353½	355	357	359	361	362½	364½	366½	368½
.7.....	352	354	355½	357½	359½	361½	363	365	367	369
.8.....	352½	354½	356	358	360	362	363½	365½	367½	369½
.9.....	353	355	356½	358½	360½	362½	364	366	368	370
72.0.....	353½	355½	357	359	361	363	364½	366½	368½	370½
.1.....	354	356	357½	359½	361½	363½	365	367	369	371
.2.....	354½	356½	358	369	362	364	366	367½	369½	371½
.3.....	355	357	358½	360½	362½	364½	366½	368	370	372
.4.....	355½	357½	359	361	363	365	367	368½	370½	372½
.5.....	356	358	359½	361½	363½	365½	367½	369	371	373
.6.....	356½	358½	360	362	364	366	368	369½	371½	373½
.7.....	357	359	360½	362½	364½	366½	368½	370	372	374
.8.....	357½	359½	361	363	365	367	369	370½	372½	374½
.9.....	358	360	361½	363½	365½	367½	369½	371	373	375

Lengths.	39. MEAN DIAMETERS.									
	39.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
65.0	336	338	339½	341½	343	345	346½	348½	350	352
.1	336½	338½	340	342	343½	345½	347	349	350½	352½
.2	337	339	340½	342½	344	346	347½	349½	351	353
.3	337½	339½	341	343	344½	346½	348	350	351½	353½
.4	338	340	341½	343½	345	347	348½	350½	352	354
.5	338½	340½	342	344	345½	347½	349	351	353	354½
.6	339	341	342½	344½	346	348	350	351½	353½	355
.7	340	341½	343½	345	347	348½	350½	352	354	355½
.8	340½	342	344	345½	347½	349	351	352½	354½	356
.9	341	342½	344½	346	348	349½	351½	353	355	356½
66.0	341½	343	345	346½	348½	350	352	353½	355½	357
.1	342	343½	345	347	348½	350½	352½	354	356	358
.2	342½	344	346	347½	349½	351	353	354½	356½	358½
.3	343	344½	346½	348	350	351½	353½	355½	357	359
.4	343½	345	347	348½	350½	352	354	356	357½	359½
.5	344	345½	347½	349	351	353	354½	356½	358	360
.6	344½	346	348	349½	351½	353½	355	357	358½	360½
.7	345	346½	348½	350	352	354	355½	357½	359	361
.8	345½	347	349	351	352½	354½	356	358	360	361½
.9	346	347½	349½	351½	353	355	356½	358½	360½	362
67.0	346½	348½	350	352	353½	355½	357	359	361	362½
.1	347	349	350½	352½	354	356	358	359½	361½	363
.2	347½	349½	351	353	354½	356½	358½	360	362	363½
.3	348	350	351½	353½	355	357	359	360½	362½	364½
.4	348½	350½	352	354	355½	357½	359½	361	363	365
.5	349	351	352½	354½	356½	358	360	361½	363½	365½
.6	349½	351½	353	355	357	358½	360½	362	364	366
.7	350	352	353½	355½	357½	359	361	363	364½	366½
.8	350½	352½	354	356	358	359½	361½	363½	365	367
.9	351	353	354½	356½	358½	360	362	364	365½	367½
68.0	351½	353½	355½	357	359	360½	362½	364½	366	368
.1	352	354	356	357½	359½	361½	363	365	367	368½
.2	352½	354½	356½	358	360	362	363½	365½	367½	369
.3	353	355	357	358½	360½	362½	364	366	368	369½
.4	353½	355½	357½	359	361	363	364½	366½	368½	370
.5	354	356	358	359½	361½	363½	365	367	369	371
.6	355	356½	358½	360	362	364	366	367½	369½	371½
.7	355½	357	359	361	362½	364½	366½	368	370	372
.8	356	357½	359½	361½	363	365	367	368½	370½	372½
.9	356½	358	360	362	363½	365½	367½	369	371	373

Lengths.	39. MEAN DIAMETERS.									
	39.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
69.0	357	358½	360½	362½	364	366	368	370	371½	373½
.1	357½	359	361	363	364½	366½	368½	370½	372	374
.2	358	359½	361½	363½	365	367	369	371	372½	374½
.3	358½	360	362	364	366	367½	369½	371½	373	375
.4	359	360½	362½	364½	366½	368	370	372	374	375½
.5	359½	361½	363	365	367	368½	370½	372½	374½	376
.6	360	362	363½	365½	367½	369	371	373	375	376½
.7	360½	362½	364	366	368	369½	371½	373½	375½	377½
.8	361	363	364½	366½	368½	370½	372	374	376	378
.9	361½	363½	365	367	369	371	372½	374½	376½	378½
70.0	362	364	365½	367½	369½	371½	373	375	377	379
.1	362½	364½	366	368	370	372	374	375½	377½	379½
.2	363	365	367	368½	370½	372½	374½	376	378	380
.3	363½	365½	367½	369	371	373	375	376½	378½	380½
.4	364	366	368	369½	371½	373½	375½	377½	379	381
.5	364½	366½	368½	370	372	374	376	378	379½	381½
.6	365	367	369	370½	372½	374½	376½	378½	380	382
.7	365½	367½	369½	371½	373	375	377	379	381	382½
.8	366	368	370	372	373½	375½	377½	379½	381½	383
.9	366½	368½	370½	372½	374	376	378	380	382	384
71.0	367	369	371	373	374½	376½	378½	380½	382½	384½
.1	367½	369½	371½	373½	375½	377	379	381	383	385
.2	368	370	372	374	376	377½	379½	381½	383½	385½
.3	368½	370½	372½	374½	376½	378	380	382	384	386
.4	369	371	373	375	377	379	380½	382½	384½	386½
.5	370	371½	373½	375½	377½	379½	381	383	385	387
.6	370½	372	374	376	378	380	382	383½	385½	387½
.7	371	372½	374½	376½	378½	380½	382½	384	386	388
.8	371½	373	375	377	379	381	383	385	386½	388½
.9	372	373½	375½	377½	379½	381½	383½	385½	387	389
72.0	372½	374½	376	378	380	382	384	386	388	389½
.1	373	375	376½	378½	380½	382½	384½	386½	388½	390½
.2	373½	375½	377	379	381	383	385	387	389	391
.3	374	376	377½	379½	381½	383½	385½	387½	389½	391½
.4	374½	376½	378½	380	382	384	386	388	390	392
.5	375	377	379	380½	382½	384½	386½	388½	390½	392½
.6	375½	377½	379½	381	383	385	387	389	391	393
.7	376	378	380	382	383½	385½	387½	389½	391½	393½
.8	376½	378½	380½	382½	384	386	388	390	392	394
.9	377	379	381	383	385	386½	388½	390½	392½	394½

Lengths.	39. MEAN DIAMETERS.									
	39.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
73.0	377½	379½	381½	383½	385½	387½	389	391	393	395
.1	378	380	382	384	386	388	390	391½	393½	395½
.2	378½	380½	382½	384½	386½	388½	390½	392½	394	396
.3	379	381	383	385	387	389	391	393	395	397
.4	379½	381½	383½	385½	387½	389½	391½	393½	395½	397½
.5	380	382	384	386	388	390	392	394	396	398
.6	380½	382½	384½	386½	388½	390½	392½	394½	396½	398½
.7	381	383	385	387	389	391	393	395	397	399
.8	381½	383½	385½	387½	389½	391½	393½	395½	397½	399½
.9	382	384	386	388	390	392	394	396	398	400
74.0	382½	384½	386½	388½	390½	392½	394½	396½	398½	400½
.1	383	385	387	389	391	393	395	397	399	401
.2	383½	385½	387½	389½	391½	393½	395½	397½	399½	401½
.3	384	386	388	390	392	394	396	398	400	402
.4	385	386½	388½	390½	392½	394½	396½	398½	400½	402½
.5	385½	387	389	391	393	395	397	399	401	403½
.6	386	388	390	391½	393½	395½	397½	400	402	404
.7	386½	388½	390½	392½	394½	396½	398½	400½	402½	404½
.8	387	389	391	393	395	397	399	401	403	405
.9	387½	389½	391½	393½	395½	397½	399½	401½	403½	405½
75.0	388	390	392	394	396	398	400	402	404	406
.1	388½	390½	392½	394½	396½	398½	400½	402½	404½	406½
.2	389	391	393	395	397	399	401	403	405	407
.3	389½	391½	393½	395½	397½	399½	401½	403½	405½	407½
.4	390	392	394	396	398	400	402	404	406	408
.5	390½	392½	394½	396½	398½	400½	402½	404½	406½	408½
.6	391	393	395	397	399	401	403	405	407	409
.7	391½	393½	395½	397½	399½	401½	403½	405½	407½	410
.8	392	394	396	398	400	402	404	406	408	410½
.9	392½	394½	396½	398½	400½	402½	404½	406½	409	411
76.0	393	395	397	399	401	403	405	407½	409½	411½
.1	393½	395½	397½	399½	401½	403½	405½	408	410	412
.2	394	396	398	400	402	404	406½	408½	410½	412½
.3	394½	396½	398½	400½	402½	405	407	409	411	413
.4	395	397	399	401	403	405½	407½	409½	411½	413½
.5	395½	397½	399½	401½	404	406	408	410	412	414
.6	396	398	400	402	404½	406½	408½	410½	412½	414½
.7	396½	398½	400½	403	405	407	409	411	413	415
.8	397	399	401	403½	405½	407½	409½	411½	413½	415½
.9	397½	399½	402	404	406	408	410	412	414	416

Lengths.	40. MEAN DIAMETERS.									
	40.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
63.0	370	372	373½	375½	377½	379	381	383	385	387
.1	370½	372½	374	376	378	380	381½	383½	385½	387½
.2	371	373	374½	376½	378½	380½	382	384	386	388
.3	371½	373½	375½	377	379	381	383	384½	386½	388½
.4	372	374	376	377½	379½	381½	383½	385	387	389
.5	372½	374½	376½	378½	380	382	384	386	387½	389½
.6	373	375	377	379	380½	382½	384½	386½	388½	390
.7	373½	375½	377½	379½	381	383	385	387	389	390½
.8	374½	376	378	380	382	383½	385½	387½	389½	391½
.9	375	376½	378½	380½	382½	384	386	388	390	392
69.0	375½	377	379	381	383	385	386½	388½	390½	392½
.1	376	378	379½	381½	383½	385½	387½	389	391	393
.2	376½	378½	380	382	384	386	388	389½	391½	393½
.3	377	379	381	382½	384½	386½	388½	390½	392	394
.4	377½	379½	381½	383	385	387	389	391	393	394½
.5	378	380	382	384	385½	387½	389½	391½	393½	395½
.6	378½	380½	382½	384½	386	388	390	392	394	396
.7	379	381	383	385	387	388½	390½	392½	394½	396½
.8	379½	381½	383½	385½	387½	389½	391	393	395	397
.9	380½	382	384	386	388	390	391½	393½	395½	397½
70.0	381	382½	384½	386½	388½	390½	392½	394	396	398
.1	381½	383½	385	387	389	391	393	395	397	398½
.2	382	384	385½	387½	389½	391½	393½	395½	397½	399½
.3	382½	384½	386½	388	390	392	394	396	398	400
.4	383	385	387	388½	390½	392½	394½	396½	398½	400½
.5	383½	385½	387½	389½	391	393	395	397	399	401
.6	384	386	388	390	392	393½	395½	397½	399½	401½
.7	384½	386½	388½	390½	392½	394½	396	398	400	402
.8	385	387	389	391	393	395	397	399	400½	402½
.9	385½	387½	389½	391½	393½	395½	397½	399½	401½	403
71.0	386	388	390	392	394	396	398	400	402	404
.1	387	388½	390½	392½	394½	396½	398½	400½	402½	404½
.2	387½	389½	391	393	395	397	399	401	403	405
.3	388	390	392	393½	395½	397½	399½	401½	403½	405½
.4	388½	390½	392½	394½	396	398	400	402	404	406
.5	389	391	393	395	397	398½	400½	402½	404½	406½
.6	389½	391½	393½	395½	397½	399½	401½	403½	405	407
.7	390	392	394	396	398	400	402	404	406	408
.8	390½	392½	394½	396½	398½	400½	402½	404½	406½	408½
.9	391	393	395	397	399	401	403	405	407	409

Lengths.	40. MEAN DIAMETERS.									
	40.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
72.0	391½	393½	395½	397½	399½	401½	403½	405½	407½	409½
.1	392	394	396	398	400	402	404	406	408	410
.2	393	394½	396½	398½	400½	402½	404½	406½	408½	410½
.3	393½	395½	397½	399	401	403	405	407	409	411
.4	394	396	398	400	402	404	406	408	410	412
.5	394½	396½	398½	400½	402½	404½	406½	408½	410½	412½
.6	395	397	399	401	403	405	407	409	411	413
.7	395½	397½	399½	401½	403½	405½	407½	409½	411½	413½
.8	396	398	400	402	404	406	408	410	412	414
.9	396½	398½	400½	402½	404½	406½	408½	410½	412½	414½
73.0	397	399	401	403	405	407	409	411	413	415
.1	397½	399½	401½	403½	405½	407½	409½	411½	413½	416
.2	398	400	402	404	406	408	410	412½	414½	416½
.3	399	400½	402½	405	407	409	411	413	415	417
.4	399½	401½	403½	405½	407½	409½	411½	413½	415½	417½
.5	400	402	404	406	408	410	412	414	416	418
.6	400½	402½	404½	406½	408½	410½	412½	414½	416½	418½
.7	401	403	405	407	409	411	413	415	417	419
.8	401½	403½	405½	407½	409½	411½	413½	415½	417½	419½
.9	402	404	406	408	410	412	414	416	418½	420½
74.0	402½	404½	406½	408½	410½	412½	414½	417	419	421
.1	403	405	407	409	411	413	415½	417½	419½	421½
.2	403½	405½	407½	409½	412	414	416	418	420	422
.3	404	406	408	410½	412½	414½	416½	418½	420½	422½
.4	404½	407	409	411	413	415	417	419	421	423
.5	405½	407½	409½	411½	413½	415½	417½	419½	421½	423½
.6	406	408	410	412	414	416	418	420	422	424½
.7	406½	408½	410½	412½	414½	416½	418½	420½	423	425
.8	407	409	411	413	415	417	419	421½	423½	425½
.9	407½	409½	411½	413½	415½	417½	420	422	424	426
75.0	408	410	412	414	416	418½	420½	422½	424½	426½
.1	408½	410½	412½	414½	417	419	421	423	425	427
.2	409	411	413	415	417½	419½	421½	423½	425½	427½
.3	409½	411½	413½	416	418	420	422	424	426	428½
.4	410	412	414½	416½	418½	420½	422½	424½	426½	429
.5	410½	413	415	417	419	421	423	425	427½	429½
.6	411½	413½	415½	417½	419½	421½	423½	426	428	430
.7	412	414	416	418	420	422	424½	426½	428½	430½
.8	412½	414½	416½	418½	420½	422½	425	427	429	431
.9	413	415	417	419	421	423½	425½	427½	429½	431½

Lengths.	40. MEAN DIAMETERS.									
	40.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
76.0.....	413½	415½	417½	419½	422	424	426	428	430	432½
.1.....	414	416	418	420	422½	424½	426½	428½	430½	433
.2.....	414½	416½	418½	421	423	425	427	429	431½	433½
.3.....	415	417	419	421½	423½	425½	427½	429½	432	434
.4.....	415½	417½	420	422	424	426	428	430½	432½	434½
.5.....	416	418	420½	422½	424½	426½	428½	431	433	435
.6.....	416½	419	421	423	425	427	429½	431½	433½	435½
.7.....	417	419½	421½	423½	425½	427½	430	432	434	436
.8.....	418	420	422	424	426	428½	430½	432½	434½	437
.9.....	418½	420½	422½	424½	426½	429	431	433	435	437½

Lengths.	49. MEAN DIAMETERS.									
	49.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
69.0.....	563½	565½	568	570	572½	575	577	579½	582	584
.1.....	564	566½	568½	571	573½	575½	578	580½	582½	585
.2.....	565	567	569½	572	574	576½	579	581	583½	586
.3.....	565½	568	570½	572½	575	577½	579½	582	584½	586½
.4.....	566½	569	571	573½	576	578	580½	583	585	587½
.5.....	567½	569½	572	574½	576½	579	581½	583½	586	588½
.6.....	568	570½	573	575	577½	580	582	584½	587	589
.7.....	569	571½	573½	576	578½	580½	583	585½	587½	590
.8.....	570	572	574½	577	579	581½	584	586	588½	591
.9.....	570½	573	575½	577½	580	582½	584½	587	589½	592
70.0.....	571½	574	576	578½	581	583	585½	588	590	592½
.1.....	572½	574½	577	579½	581½	584	586½	588½	591	593½
.2.....	573	575½	578	580	582½	585	587	589½	592	594½
.3.....	574	576	578½	581	583½	585½	588	590½	593	595
.4.....	574½	577	579½	582	584	586½	589	591	593½	596
.5.....	575½	578	580	582½	585	587½	589½	592	594½	597
.6.....	576½	578½	581	583½	586	588	590½	593	595½	597½
.7.....	577	579½	582	584	586½	589	591½	594	596	598½
.8.....	578	580½	582½	585	587½	590	592	594½	597	599½
.9.....	579	581	583½	586	588½	590½	593	595½	598	600
71.0.....	579½	582	584½	586½	589	591½	594	596½	598½	601
.1.....	580½	583	585	587½	590	592½	594½	597	599½	602
.2.....	581	583½	586	588½	591	593	595½	598	600½	603
.3.....	582	584½	587	589	591½	594	596½	599	601	603½
.4.....	583	585	587½	590	592½	595	597	599½	602	604½
.5.....	583½	586	588½	591	593½	595½	598	600½	603	605½
.6.....	584½	587	589½	591½	594	596½	599	601½	603½	606
.7.....	585½	587½	590	592½	595	597½	599½	602	604½	607
.8.....	586	588½	591	593½	595½	598	600½	603	605½	608
.9.....	587	589½	591½	594	596½	599	601½	604	606½	608½

Lengths.	49. MEAN DIAMETERS.									
	49.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
72.0	588	590	592⅓	595	597½	600	602	604⅓	607	609½
.1	588⅓	591	593⅓	596	598	600½	603	605⅓	608	610½
.2	589½	592	594	596½	599	601½	604	606½	609	611
.3	590	592½	595	597⅓	600	602⅓	605	607	609⅓	612
.4	591	593½	596	598½	600½	603	605½	608	610½	613
.5	592	591½	596½	599	601½	604	606½	609	611½	614
.6	592⅓	595	597⅓	600	602⅓	605	607½	609½	612	614⅓
.7	593⅓	596	598½	601	603	605½	608	610½	613	615½
.8	594½	596⅓	599	601½	604	606⅓	609	611½	614	616½
.9	595	597⅓	600	602½	605	607½	610	612	614½	617
73.0	596	598½	601	603	605½	608	610½	613	615½	618
.1	596⅓	599	601⅓	604	606½	609	611⅓	614	616½	619
.2	597½	600	602½	605	607⅓	610	612½	615	617	619½
.3	598½	601	603½	605½	608	610½	613	615½	618	620½
.4	599	601½	604	606½	609	611⅓	614	616½	619	621⅓
.5	600	602⅓	605	607½	610	612½	615	617⅓	620	622½
.6	601	603½	605½	608	610½	613	615⅓	618	620½	623
.7	601½	604	606½	609	611½	614	616½	619	621½	624
.8	602⅓	605	607⅓	610	612½	615	617⅓	620	622½	625
.9	603⅓	605½	608	610½	613	615½	618	620½	623	625½
74.0	604	606⅓	609	611⅓	614	616½	619	621⅓	624	626½
.1	605	607½	610	612½	615	617½	620	622⅓	625	627½
.2	605⅓	608	610½	613	615⅓	618	620⅓	623	625½	628
.3	606½	609	611⅓	614	616½	619	621½	624	626½	629
.4	607½	610	612½	615	617½	620	622⅓	625	627½	630
.5	608	610½	613	615½	618	620½	623	625½	628	630½
.6	609	611⅓	614	616½	619	621½	624	626½	629	631½
.7	610	612½	615	617⅓	620	622½	625	627⅓	630	632½
.8	610½	613	615½	618	620½	623	625½	628	630½	633⅓
.9	611½	614	616½	619	621½	624	626½	629	631½	634
75.0	612½	615	617⅓	620	622½	625	627⅓	630	632½	635
.1	613	615⅓	618	620½	623	625½	628	630½	633½	636
.2	614	616½	619	621½	624	626½	629	631½	634	636½
.3	614½	617	619½	622½	625	627½	630	632½	635	637⅓
.4	615½	618	620½	623	625½	628	630½	633	636	638½
.5	616½	619	621½	624	626½	629	631½	634	636½	639
.6	617	619⅓	622	624½	627½	630	632½	635	637½	640
.7	618	620½	623	625½	628	630½	633	636	638½	641
.8	619	621½	624	626½	629	631½	634	636½	639	641½
.9	619½	622	624½	627	630	632½	635	637½	640	642½

Lengths.	49. MEAN DIAMETERS.									
	49.0	.1	.2	.3	.4	.5	.6	.7	.8	.9
76.0.....	620½	623	625½	628	630½	633	635½	638½	641	643½
.1.....	621	624	626½	629	631½	634	636½	639	641½	644½
.2.....	622	624½	627	629½	632	635	637½	640	642½	645
.3.....	623	625½	628	630½	633	635½	638	641	643½	646
.4.....	623½	626	629	631½	634	636½	639	641½	644	647
.5.....	624½	627	629½	632	634½	637½	640	642½	645	647½
.6.....	625½	628	630½	633	635½	638	640½	643½	646	648½
.7.....	626	628½	631½	634	636½	639	641½	644	646½	649½
.8.....	627	629½	632	634½	637	640	642½	645	647½	650
.9.....	628	630½	633	635½	638	640½	643	646	648½	651

TABLE No. 2.

ULLAGE OR WANTAGE.

Beneath the dry inches, and opposite the capacity and bung diameter of the cask, is stated the ullage or wantage in wine-gallons.

This table is solely for use when the capacities of casks vary so materially from the capacities indicated on the wantage rod that it will not show the true wantage.

In computing this table any final fraction less than .25 is dropped; if .25 or any intermediate fraction to and including .75, it is called one-half gallon; if above .75 to the unit, it is called a whole gallon.

ULLAGE OR WANTAGE TABLE.

Capacity of cask.	Bung diameter.	NUMBER OF DRY INCHES.																No. of dry inches corresponding to an ullage of ½ gallon.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Galls.	*Inches.*																		
10...	13...	0	1	1½	2½	3½	4½	5½	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
10...	14...	0	½	1½	2	3	4	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅝
11...	13...	0	1	1½	2½	4	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
11...	14...	0	1	1½	2½	3½	4½	5½	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
11...	15...	0	½	1½	2	3	4	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅝
12...	14...	0	1	1½	2½	3½	5	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
12...	15...	0	½	1½	2½	3½	4½	5½	6½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅝
13...	14...	0	1	2	3	4	5½	6½	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
13...	15...	0	1	1½	2½	3½	5	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
13...	16...	0	½	1½	2½	3½	4½	5½	6½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅝
14...	15...	0	1	1½	3	4	5	6½	7½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
14...	16...	0	1	1½	2½	3½	4½	6	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
15...	15...	0	1	2	3	4	5½	7	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
15...	16...	0	1	1½	2½	4	5	6	7½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
16...	15...	0	1	2	3	4½	6	7½	8½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
16...	16...	0	1	2	3	4	5½	6½	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
16...	17...	0	1	1½	2½	3½	5	6	7½	8½	.....	.....	.....	.....	.....	.....	.....	.....	1½
17...	16...	0	1	2	3	4½	5½	7	8½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1½
17...	17...	0	1	1½	2½	4	5	6½	8	9	.....	.....	.....	.....	.....	.....	.....	.....	1½
18...	16...	½	1	2	3	4½	6	7½	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
18...	17...	0	1	2	3	4	5½	7	8½	9½	.....	.....	.....	.....	.....	.....	.....	.....	1½
19...	16...	½	1	2	3½	5	6½	8	9½	.....	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
19...	17...	0	1	2	3	4½	6	7½	9	10	.....	.....	.....	.....	.....	.....	.....	.....	1½
19...	18...	0	1	1½	3	4	5½	6½	8	9½	.....	.....	.....	.....	.....	.....	.....	.....	1½
20...	16...	½	1	2	3½	5	6½	8½	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	1¼

ULLAGE OR WANTAGE TABLE.

Capacity of cask.	Bung diameter.	NUMBER OF DRY INCHES.																	No. of dry inches corresponding to an ullage of ½ gallon.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Galls.	*Inches.*																		
20..	17...	½	1	2	3	4½	6	7½	9	11	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
20..	18...	0	1	2	3	4	5½	7	8½	10	.....	.....	.....	.....	.....	.....	.....	.....	1½
21..	17...	½	1	2	3½	5	6½	8	9½	11½	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
21..	18...	0	1	2	3	4½	6	7½	9	10½	.....	.....	.....	.....	.....	.....	.....	.....	1½
22..	17...	½	1	2	3½	5	6½	8½	10	12	.....	.....	.....	.....	.....	.....	.....	.....	1¼
22..	18...	0	1	2	3	4½	6	7½	9½	11	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
24..	18...	½	1	2	3½	5	6½	8½	10	12	.....	.....	.....	.....	.....	.....	.....	.....	1⅜
24..	19...	0	1	2	3	4½	6	8	9½	11	13	.....	.....	.....	.....	.....	.....	.....	1½
26..	18...	½	1	2½	4	5½	7½	9	11	13	.....	.....	.....	.....	.....	.....	.....	.....	1¼
26..	19...	½	1	2	3½	5	6½	8½	10	12	14	.....	.....	.....	.....	.....	.....	.....	1⅜
28..	18...	½	1	2½	4	6	8	10	12	14	.....	.....	.....	.....	.....	.....	.....	.....	1¼
28..	19...	½	1	2½	4	5½	7	9	11	13	15	.....	.....	.....	.....	.....	.....	.....	1¼
42..	22...	½	1	2½	4½	6½	8½	11	13½	16	18½	21	.....	.....	.....	.....	.....	.....	1¼
43..	22...	½	1½	2½	4½	6½	9	11	13½	16	19	21½	.....	.....	.....	.....	.....	.....	1¼
44..	22...	½	1½	3	4½	6½	9	11½	14	16½	19½	22	.....	.....	.....	.....	.....	.....	1¼
44..	23...	½	1	2½	4½	6½	8½	10½	13	15½	18	20½	23½	.....	.....	.....	.....	.....	1¼
45..	23...	½	1	2½	4½	6½	8½	11	13½	16	18½	21	24	.....	.....	.....	.....	.....	1¼
45..	24...	½	1	2½	4	6	8	10	12½	15	17½	20	22½	.....	.....	.....	.....	.....	1¼
48..	23...	½	1½	3	4½	7	9	11½	14½	17	20	22½	25½	.....	.....	.....	.....	.....	1¼
48..	24...	½	1	2½	4½	6½	8½	11	13½	16	18½	21½	24	.....	.....	.....	.....	.....	1¼
64..	24...	½	1½	3½	6	8½	11½	14½	18	21½	25	28½	32	.....	.....	.....	.....	.....	1⅛
106..	30...	½	1½	3½	6½	9½	13	17	21	25	29½	34	39	43½	48	53	.....	.....	1⅛
120..	31...	½	2	4	7	10½	14	18	22½	27	32	37	42	47	52	57½	62½	.....	1
140..	34...	½	2	4	7	10	14	18	22½	27½	32	37⅓	42½	48	53½	59	64½	70	1⅛

TABLE No. 3.

CORRECTION OF VOLUME.

The apparent wine-gallons contents of a cask, or package, and the per centum correction of volume having been found, opposite the former, in the left-hand margin of the table, and beneath the latter, in the upper margin, will be found—in gallons and halves of gallons—the quantity to be subtracted from the apparent contents, if the temperature of the spirits is above 60° Fah., or to be added if the temperature of the spirits is below 60° Fah.

Thus if, after deducting the wantage, a cask is found to contain 42 gallons of spirits, having an indication of 107, at temperature 74°, the correction, as shown by Table No. 5, page 494, is "0.7 subt." By looking opposite 42, and beneath 0.7, it will be seen that "½" gallon is to be subtracted from the 42 gallons for correction of volume. In computing this table, the rule given on page 29, for the treatment of fractions has been followed.

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6	1·7
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	½
15½	0	0	0	0	0	0	0	0	0	0	0	0	0	0	½
16	0	0	0	0	0	0	0	0	0	0	0	0	0	½	½
16½	0	0	0	0	0	0	0	0	0	0	0	0	0	½	½
17	0	0	0	0	0	0	0	0	0	0	0	0	½	½	½
17½	0	0	0	0	0	0	0	0	0	0	0	0	½	½	½
18	0	0	0	0	0	0	0	0	0	0	0	½	½	½	½
18½	0	0	0	0	0	0	0	0	0	0	0	½	½	½	½
19	0	0	0	0	0	0	0	0	0	0	0	½	½	½	½
19½	0	0	0	0	0	0	0	0	0	0	½	½	½	½	½
20	0	0	0	0	0	0	0	0	0	0	½	½	½	½	½
20½	0	0	0	0	0	0	0	0	0	0	½	½	½	½	½
21	0	0	0	0	0	0	0	0	0	½	½	½	½	½	½
21½	0	0	0	0	0	0	0	0	0	½	½	½	½	½	½
22	0	0	0	0	0	0	0	0	0	½	½	½	½	½	½
22½	0	0	0	0	0	0	0	0	0	½	½	½	½	½	½
23	0	0	0	0	0	0	0	0	½	½	½	½	½	½	½
23½	0	0	0	0	0	0	0	0	½	½	½	½	½	½	½
24	0	0	0	0	0	0	0	0	½	½	½	½	½	½	½
24½	0	0	0	0	0	0	0	0	½	½	½	½	½	½	½
25	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
25½	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
26	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
26½	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
27	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
27½	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
28	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
28½	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
29	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
29½	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
30	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
30½	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
31	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
31½	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1	3·2
10	0	0	0	0	0	0	0	½	½	½	½	½	½	½	½
10½	0	0	0	0	0	0	½	½	½	½	½	½	½	½	½
11	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
11½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
12	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
12½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
13	0	0	½	½	½	½	½	½	½	½	½	½	½	½	½
13½	0	½	½	½	½	½	½	½	½	½	½	½	½	½	½
14	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
14½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
15	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
15½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
16	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
16½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
17	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
17½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
18	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
18½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
19	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
19½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
20	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
20½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
21	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
21½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
22	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
22½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
23	½	½	½	½	½	½	½	½	½	½	½	½	½	½	½
23½	½	½	½	½	½	½	½	½	½	½	½	½	½	½	1
24	½	½	½	½	½	½	½	½	½	½	½	½	½	½	1
24½	½	½	½	½	½	½	½	½	½	½	½	½	½	1	1
25	½	½	½	½	½	½	½	½	½	½	½	½	½	1	1
25½	½	½	½	½	½	½	½	½	½	½	½	½	1	1	1
26	½	½	½	½	½	½	½	½	½	½	½	1	1	1	1
26½	½	½	½	½	½	½	½	½	½	½	½	1	1	1	1
27	½	½	½	½	½	½	½	½	½	½	1	1	1	1	1
27½	½	½	½	½	½	½	½	½	½	½	1	1	1	1	1
28	½	½	½	½	½	½	½	½	½	1	1	1	1	1	1
28½	½	½	½	½	½	½	½	½	½	1	1	1	1	1	1
29	½	½	½	½	½	½	½	½	1	1	1	1	1	1	1
29½	½	½	½	½	½	½	½	½	1	1	1	1	1	1	1
30	½	½	½	½	½	½	½	½	1	1	1	1	1	1	1
30½	½	½	½	½	½	½	½	1	1	1	1	1	1	1	1
31	½	½	½	½	½	½	½	1	1	1	1	1	1	1	1
31½	½	½	½	½	½	½	1	1	1	1	1	1	1	1	1

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6	1·7
32	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
32½	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
33	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
33½	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
34	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
34½	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
35	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
35½	0	0	0	0	0	½	½	½	½	½	½	½	½	½	½
36	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
36½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
37	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
37½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
38	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
38½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
39	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
39½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
40	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
40½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
41	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
41½	0	0	0	0	½	½	½	½	½	½	½	½	½	½	½
42	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
42½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
43	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
43½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
44	0	0	0	½	½	½	½	½	½	½	½	½	½	½	½
44½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	1
45	0	0	0	½	½	½	½	½	½	½	½	½	½	½	1
45½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	1
46	0	0	0	½	½	½	½	½	½	½	½	½	½	½	1
46½	0	0	0	½	½	½	½	½	½	½	½	½	½	½	1
47	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
47½	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
48	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
48½	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
49	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
49½	0	0	0	½	½	½	½	½	½	½	½	½	½	1	1
50	0	0	½	½	½	½	½	½	½	½	½	½	½	1	1
50½	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
51	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
51½	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
52	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
52½	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
53	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1
53½	0	0	½	½	½	½	½	½	½	½	½	½	1	1	1

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1	3·2
32	½	½	½	½	½	½	1	1	1	1	1	1	1	1	1
32½	½	½	½	½	½	½	1	1	1	1	1	1	1	1	1
33	½	½	½	½	½	1	1	1	1	1	1	1	1	1	1
33½	½	½	½	½	½	1	1	1	1	1	1	1	1	1	1
34	½	½	½	½	½	1	1	1	1	1	1	1	1	1	1
34½	½	½	½	½	1	1	1	1	1	1	1	1	1	1	1
35	½	½	½	½	1	1	1	1	1	1	1	1	1	1	1
35½	½	½	½	½	1	1	1	1	1	1	1	1	1	1	1
36	½	½	½	1	1	1	1	1	1	1	1	1	1	1	1
36½	½	½	½	1	1	1	1	1	1	1	1	1	1	1	1
37	½	½	½	1	1	1	1	1	1	1	1	1	1	1	1
37½	½	½	1	1	1	1	1	1	1	1	1	1	1	1	1
38	½	½	1	1	1	1	1	1	1	1	1	1	1	1	1
38½	½	½	1	1	1	1	1	1	1	1	1	1	1	1	1
39	½	½	1	1	1	1	1	1	1	1	1	1	1	1	1
39½	½	1	1	1	1	1	1	1	1	1	1	1	1	1	1½
40	½	1	1	1	1	1	1	1	1	1	1	1	1	1	1½
40½	½	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½
41	½	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½
41½	½	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½
42	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½
42½	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½
43	1	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½
43½	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½
44	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½
44½	1	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½
45	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½
45½	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½
46	1	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½
46½	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½
47	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½
47½	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½
48	1	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½
48½	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½
49	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½
49½	1	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½
50	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
50½	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
51	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
51½	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
52	1	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½
52½	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½
53	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½
53½	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6	1·7
54	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
54½	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
55	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
55½	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
56	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
56½	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
57	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
57½	0	0	½	½	½	½	½	½	½	½	½	1	1	1	1
58	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
58½	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
59	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
59½	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
60	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
60½	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
61	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
61½	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
62	0	0	½	½	½	½	½	½	½	½	1	1	1	1	1
62½	0	0	½	½	½	½	½	½	½	1	1	1	1	1	1
63	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
63½	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
64	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
64½	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
65	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
65½	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
66	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
66½	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
67	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
67½	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
68	0	½	½	½	½	½	½	½	½	1	1	1	1	1	1
68½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
69	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
69½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
70	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
70½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
71	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
71½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
72	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
72½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
73	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
73½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1
74	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1½
74½	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1½
75	0	½	½	½	½	½	½	½	1	1	1	1	1	1	1½
75½	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1	3·2
54	1	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½
54½	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	1½
55	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2
55½	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2
56	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2
56½	1	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2
57	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2	2
57½	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2	2
58	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2	2
58½	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2
59	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2
59½	1	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2
60	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2
60½	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2
61	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2
61½	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2
62	1	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2
62½	1	1	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2
63	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2
63½	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2
64	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2
64½	1	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2
65	1	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2
65½	1	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2
66	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2
66½	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2
67	1	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2
67½	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
68	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
68½	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
69	1	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
69½	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
70	1½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
70½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½
71	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½
71½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½
72	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½
72½	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½
73	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½
73½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½
74	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½
74½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½
75	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½
75½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6	1·7
76	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½
76½	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½
77	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½
77½	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½
78	0	½	½	½	½	½	½	1	1	1	1	1	1	1	1½
78½	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
79	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
79½	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
80	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
80½	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
81	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
81½	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
82	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
82½	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
83	0	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½
83½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
84	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
84½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
85	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
85½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
86	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
86½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
87	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
87½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
88	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
88½	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
89	½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½
89½	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
90	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
90½	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
91	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
91½	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
92	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
92½	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
93	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
93½	½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½
94	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½	1½
94½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½	1½
95	½	½	½	½	⅛	1	1	1	1	1	1	1½	1½	1½	1½
95½	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½	1½
96	½	½	½	½	½	1	1	1	1	1	1	1½	1½	1½	1½
96½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
97	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
97½	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1	3·2
76	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½
76½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½	2½
77	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½	2½
77½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½	2½
78	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½
78½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½
79	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½
79½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½
80	1½	1½	1½	1½	2	2	2	2	2	2	2	2½	2½	2½	2½
80½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
81	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
81½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
82	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
82½	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
83	1½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½
83½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
84	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
84½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
85	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
85½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½
86	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3
86½	1½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3
87	1½	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3
87½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3
88	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3
88½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3
89	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3
89½	1½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3
90	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3
90½	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3
91	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3
91½	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3
92	1½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3
92½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3
93	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3
93½	1½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3
94	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3	3
94½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3	3
95	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3
95½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3
96	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3
96½	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3
97	1½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3
97½	2	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6	1·7
98.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
98½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
99.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
99½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
100.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
100½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
101.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
101½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
102.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
102½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½
103.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2
103½.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2
104.....	½	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2
104½.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
105.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
105½.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
106.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
106½.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
107.....	½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2
107½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½	2
108.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½	2
108½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½	2
109.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	1½	2
109½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
110.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
110½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
111.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
111½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
112.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
112½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
113.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
113½.....	½	½	½	½	1	1	1	1	1	1½	1½	1½	1½	2	2
114.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
114½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
115.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
115½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
116.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
116½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	1½	2	2
117.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
117½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
118.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
118½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
119.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
119½.....	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1	3·2
98	2	2	2	2	2	2½	2½	2½	2½	2½	2½	3	3	3	3
98½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
99	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
99½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
100	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
100½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
101	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
101½	2	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3
102	2	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½
102½	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½
103	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½
103½	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½
104	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½
104½	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½
105	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½
105½	2	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½
106	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½
106½	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½
107	2	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½
107½	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½	3½
108	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3	3½	3½
108½	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½
109	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½
109½	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½
110	2	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½
110½	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½
111	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½
111½	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½
112	2	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½
112½	2	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
113	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
113½	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
114	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
114½	2	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½
115	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½	3½
115½	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½	3½
116	2	2	2½	2½	2½	2½	3	3	3	3	3	3½	3½	3½	3½
116½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	3½
117	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	3½
117½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
118	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
118½	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
119	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
119½	2	2½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·2	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6
120	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
120½	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
121	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
121½	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
122	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
122½	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
123	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
123½	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
124	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
124½	0	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2
125	½	½	½	½	½	1	1	1	1½	1½	1½	1½	1½	2	2
125½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
126	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
126½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
127	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
127½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
128	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
128½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
129	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
129½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
130	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
130½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
131	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
131½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
132	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
132½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
133	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
133½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
134	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
134½	½	½	½	½	1	1	1	1	1½	1½	1½	1½	2	2	2
135	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
135½	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
136	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
136½	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
137	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
137½	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
138	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
138½	½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2
139	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2
139½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2
140	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2
140½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2
141	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
141½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·7	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1
120	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	3½
120½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	3½
121	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
121½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
122	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
122½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
123	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
123½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
124	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
124½	2	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4
125	2	2½	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	3½	4
125½	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
126	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
126½	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
127	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
127½	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
128	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
128½	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
129	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4
129½	2	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4
130	2	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4
130½	2	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4
131	2	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
131½	2	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
132	2	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
132½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
133	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
133½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4
134	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4
134½	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4
135	2½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4
135½	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4
136	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4
136½	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4
137	2½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4
137½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4	4½
138	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4	4½
138½	2½	2½	2½	3	3	3	3	3½	3½	3½	3½	4	4	4	4½
139	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½
139½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½
140	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½
140½	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½
141	2½	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½
141½	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4	4½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	0·2	0·3	0·4	0·5	0·6	0·7	0·8	0·9	1·0	1·1	1·2	1·3	1·4	1·5	1·6
142	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
142½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
143	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
143½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
144	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
144½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
145	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
145½	½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½
146	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
146½	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
147	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
147½	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
148	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
148½	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
149	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
149½	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½
150	½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½
150½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
151	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
151½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
152	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
152½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
153	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
153½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
154	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
154½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
155	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
155½	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
156	½	½	½	1	1	1	1	1½	1½	1½	2	2	2	2½	2½
156½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
157	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
157½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
158	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
158½	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
159	½	½	½	1	1	1	1½	1½	1½	1½	2	2	2	2½	2½
159½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½	2½
160	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½	2½
160½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2	2½	2½
161	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½
161½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½
162	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½
162½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½
163	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½
163½	½	½	½	1	1	1	1½	1½	1½	2	2	2	2½	2½	2½

TABLE FOR CORRECTION OF VOLUME.

Add when the spirits are below 60° Fah.; subtract when above 60°.

Apparent contents.	1·7	1·8	1·9	2·0	2·1	2·2	2·3	2·4	2·5	2·6	2·7	2·8	2·9	3·0	3·1
142.....	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½
142½.....	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½
143.....	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½
143½.....	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½
144.....	2½	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½
144½.....	2½	2½	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½
145.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½	4½
145½.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½	4½
146.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½	4½
146½.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4	4½	4½
147.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½
147½.....	2½	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½
148.....	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½
148½.....	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½
149.....	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½
149½.....	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½
150.....	2½	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½
150½.....	2½	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½	4½
151.....	2½	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½	4½
151½.....	2½	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½	4½
152.....	2½	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½
152½.....	2½	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½
153.....	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½
153½.....	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5
154.....	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5
154½.....	2½	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5
155.....	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½	5
155½.....	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½	5
156.....	2½	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½	5
156½.....	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½	4½	5
157.....	2½	3	3	3	3½	3½	3½	4	4	4	4	4½	4½	4½	5
157½.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½	5
158.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½	5
158½.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
159.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
159½.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
160.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
160½.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
161.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
161½.....	2½	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
162.....	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
162½.....	3	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	5	5
163.....	3	3	3	3½	3½	3½	3½	4	4	4	4½	4½	4½	5	5
163½.....	3	3	3	3½	3½	3½	4	4	4	4½	4½	4½	4½	5	5

TABLE No. 4.

FOR FINDING THE PROOF-GALLONS.

The wine-gallons and the true per cent. having been found, beneath the first, on the upper margin, and opposite the last, on the left-hand margin, will be found the proof-gallons.

In computing the following table the fraction of five thousandths (.005) is dropped. Thus, 32½ wine-gallons multiplied by 115 proof, equals 37.375 proof-gallons, called 37.37.

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
40	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80
41	0.41	0.61	0.82	1.02	1.23	1.43	1.64	1.84
42	0.42	0.63	0.84	1.05	1.26	1.47	1.68	1.89
43	0.43	0.64	0.86	1.07	1.29	1.50	1.72	1.93
44	0.44	0.66	0.88	1.10	1.32	1.54	1.76	1.98
45	0.45	0.67	0.90	1.12	1.35	1.57	1.80	2.02
46	0.46	0.69	0.92	1.15	1.38	1.61	1.84	2.07
47	0.47	0.70	0.94	1.17	1.41	1.64	1.88	2.11
48	0.48	0.72	0.96	1.20	1.44	1.68	1.92	2.16
49	0.49	0.73	0.98	1.22	1.47	1.71	1.96	2.20
50	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
51	0.51	0.76	1.02	1.27	1.53	1.78	2.04	2.29
52	0.52	0.78	1.04	1.30	1.56	1.82	2.08	2.34
53	0.53	0.79	1.06	1.32	1.59	1.85	2.12	2.38
54	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43
55	0.55	0.82	1.10	1.37	1.65	1.92	2.20	2.47
56	0.56	0.84	1.12	1.40	1.68	1.96	2.24	2.52
57	0.57	0.85	1.14	1.42	1.71	1.99	2.28	2.56
58	0.58	0.87	1.16	1.45	1.74	2.03	2.32	2.61
59	0.59	0.88	1.18	1.47	1.77	2.06	2.36	2.65
60	0.60	0.90	1.20	1.50	1.80	2.10	2.40	2.70
61	0.61	0.91	1.22	1.52	1.83	2.13	2.44	2.74
62	0.62	0.93	1.24	1.55	1.86	2.17	2.48	2.79
63	0.63	0.94	1.26	1.57	1.89	2.20	2.52	2.83
64	0.64	0.96	1.28	1.60	1.92	2.24	2.56	2.88
65	0.65	0.97	1.30	1.62	1.95	2.27	2.60	2.92
66	0.66	0.99	1.32	1.65	1.98	2.31	2.64	2.97
67	0.67	1.00	1.34	1.67	2.01	2.34	2.68	3.01
68	0.68	1.02	1.36	1.70	2.04	2.38	2.72	3.06
69	0.69	1.03	1.38	1.72	2.07	2.41	2.76	3.10
70	0.70	1.05	1.40	1.75	2.10	2.45	2.80	3.15
71	0.71	1.06	1.42	1.77	2.13	2.48	2.84	3.19
72	0.72	1.08	1.44	1.80	2.16	2.52	2.88	3.24
73	0.73	1.09	1.46	1.82	2.19	2.55	2.92	3.28
74	0.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33
75	0.75	1.12	1.50	1.87	2.25	2.62	3.00	3.37
76	0.76	1.14	1.52	1.90	2.28	2.66	3.04	3.42
77	0.77	1.15	1.54	1.92	2.31	2.69	3.08	3.46
78	0.78	1.17	1.56	1.95	2.34	2.73	3.12	3.51
79	0.79	1.18	1.58	1.97	2.37	2.76	3.16	3.55
80	0.80	1.20	1.60	2.00	2.40	2.80	3.20	3.60
31	0.81	1.21	1.62	2.02	2.43	2.83	3.24	3.64
82	0.82	1.23	1.64	2.05	2.46	2.87	3.28	3.69
83	0.83	1.24	1.66	2.07	2.49	2.90	3.32	3.73
84	0.84	1.26	1.68	2.10	2.52	2.94	3.36	3.78
85	0.85	1.27	1.70	2.12	2.55	2.97	3.40	3.82

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
86...	0.86	1.29	1.72	2.15	2.58	3.01	3.44	3.87
87...	0.87	1.30	1.74	2.17	2.61	3.04	3.48	3.91
88...	0.88	1.32	1.76	2.20	2.64	3.08	3.52	3.96
89...	0.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00
90...	0.90	1.35	1.80	2.25	2.70	3.15	3.60	4.05
91...	0.91	1.36	1.82	2.27	2.73	3.18	3.64	4.09
92...	0.92	1.38	1.84	2.30	2.76	3.22	3.68	4.14
93...	0.93	1.39	1.86	2.32	2.79	3.25	3.72	4.18
94...	0.94	1.41	1.88	2.35	2.82	3.29	3.76	4.23
95...	0.95	1.42	1.90	2.37	2.85	3.32	3.80	4.27
96...	0.96	1.44	1.92	2.40	2.88	3.36	3.84	4.32
97...	0.97	1.45	1.94	2.42	2.91	3.39	3.88	4.36
98...	0.98	1.47	1.96	2.45	2.94	3.43	3.92	4.41
99...	0.99	1.48	1.98	2.47	2.97	3.46	3.96	4.45
100...	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
101...	1.01	1.51	2.02	2.52	3.03	3.53	4.04	4.54
102...	1.02	1.53	2.04	2.55	3.06	3.57	4.08	4.59
103...	1.03	1.54	2.06	2.57	3.09	3.60	4.12	4.63
104...	1.04	1.56	2.08	2.60	3.12	3.64	4.16	4.68
105...	1.05	1.57	2.10	2.62	3.15	3.67	4.20	4.72
106...	1.06	1.59	2.12	2.65	3.18	3.71	4.24	4.77
107...	1.07	1.60	2.14	2.67	3.21	3.74	4.28	4.81
108...	1.08	1.62	2.16	2.70	3.24	3.78	4.32	4.86
109...	1.09	1.63	2.18	2.72	3.27	3.81	4.36	4.90
110...	1.10	1.65	2.20	2.75	3.30	3.85	4.40	4.95
111...	1.11	1.66	2.22	2.77	3.33	3.88	4.44	4.99
112...	1.12	1.68	2.24	2.80	3.36	3.92	4.48	5.04
113...	1 13	1.69	2.26	2.82	3.39	3.95	4.52	5.08
114...	1.14	1.71	2.28	2.85	3.42	3.99	4.56	5.13
115...	1.15	1.72	2.30	2.87	3.45	4.02	4.60	5.17
116...	1.16	1.74	2.32	2.90	3.48	4.06	4.64	5.22
117...	1.17	1.75	2.34	2.92	3.51	4.09	4.68	5.26
118...	1.18	1.77	2.36	2.95	3.54	4.13	4.72	5.31
119...	1.19	1.78	2.38	2.97	3.57	4.16	4.76	5.35
120...	1.20	1.80	2.40	3.00	3.60	4.20	4.80	5.40
121...	1.21	1.81	2.42	3.02	3.63	4.23	4.84	5.44
122...	1.22	1.83	2.44	3.05	3.66	4.27	4.88	5.49
123...	1.23	1.84	2.46	3.07	3.69	4.30	4.92	5.53
124...	1.24	1.86	2.48	3.10	3.72	4.34	4.96	5.58
125...	1.25	1.87	2.50	3.12	3.75	4.37	5.00	5.62
126...	1.26	1.89	2.52	3.15	3.78	4.41	5.04	5.67
127...	1.27	1.90	2.54	3.17	3.81	4.44	5.08	5.71
128...	1.28	1.92	2.56	3.20	3.84	4.48	5.12	5.76
129...	1.29	1.93	2.58	3.22	3.87	4.51	5.16	5.80
130...	1.30	1.95	2.60	3.25	3.90	4.55	5.20	5.85
131...	1.31	1.96	2.62	3.27	3.93	4.58	5.24	5.89

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
132...	1.32	1.98	2.64	3.30	3.96	4.62	5.28	5.94
133...	1.33	1.99	2.66	3.32	3.99	4.65	5.32	5.98
134...	1.34	2.01	2.68	3.35	4.02	4.69	5.36	6.03
135...	1.35	2.02	2.70	3.37	4.05	4.72	5.40	6.07
136...	1.36	2.04	2.72	3.40	4.08	4.76	5.44	6.12
137...	1.37	2.05	2.74	3.42	4.11	4.79	5.48	6.16
138...	1.38	2.07	2.76	3.45	4.14	4.83	5.52	6.21
139...	1.39	2.08	2.78	3.47	4.17	4.86	5.56	6.25
140...	1.40	2.10	2.80	3.50	4.20	4.90	5.60	6.30
141...	1.41	2.11	2.82	3.52	4.23	4.93	5.64	6.34
142...	1.42	2.13	2.84	3.55	4.26	4.97	5.68	6.39
143...	1.43	2.14	2.86	3.57	4.29	5.00	5.72	6.43
144...	1.44	2.16	2.88	3.60	4.32	5.04	5.76	6.48
145...	1.45	2.17	2.90	3.62	4.35	5.07	5.80	6.52
146...	1.46	2.19	2.92	3.65	4.38	5.11	5.84	6.57
147...	1.47	2.20	2.94	3.67	4.41	5.14	5.88	6.61
148...	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.66
149...	1.49	2.23	2.98	3.72	4.47	5.21	5.96	6.70
150...	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75
151...	1.51	2.26	3.02	3.77	4.53	5.28	6.04	6.79
152...	1.52	2.28	3.04	3.80	4.56	5.32	6.08	6.84
153...	1.53	2.29	3.06	3.82	4.59	5.35	6.12	6.88
154...	1.54	2.31	3.08	3.85	4.62	5.39	6.16	6.93
155...	1.55	2.32	3.10	3.87	4.65	5.42	6.20	6.97
156...	1.56	2.34	3.12	3.90	4.68	5.46	6.24	7.02
157...	1.57	2.35	3.14	3.92	4.71	5.49	6.28	7.06
158...	1.58	2.37	3.16	3.95	4.74	5.53	6.32	7.11
159...	1.59	2.38	3.18	3.97	4.77	5.56	6 36	7.15
160...	1.60	2.40	3.20	4.00	4.80	5.60	6.40	7.20
161...	1.61	2.41	3.22	4.02	4.83	5.63	6.44	7.24
162...	1.62	2.43	3.24	4.05	4.86	5.67	6.48	7.29
163...	1.63	2.44	3.26	4.07	4.89	5.70	6.52	7.33
164...	1.64	2.46	3.28	4.10	4.92	5.74	6.56	7.38
165...	1.65	2.47	3.30	4.12	4.95	5.77	6.60	7.42
166...	1.66	2.49	3.32	4.15	4.98	5.81	6.64	7.47
167...	1.67	2.50	3.34	4.17	5.01	5.84	6.68	7.51
168...	1.68	2.52	3.36	4.20	5.04	5.88	6.72	7.56
169...	1.69	2.53	3.38	4.22	5.07	5.91	6.76	7.60
170...	1.70	2.55	3.40	4.25	5.10	5.95	6.80	7.65
171...	1.71	2.56	3.42	4.27	5.13	5.98	6.84	7.69
172...	1.72	2.58	3.44	4.30	5.16	6.02	6.88	7.74
173...	1.73	2.59	3.46	4.32	5.19	6.05	6.92	7.78
174...	1.74	2.61	3.48	4.35	5.22	6.09	6.96	7.83
175...	1.75	2.62	3.50	4.37	5.25	6.12	7.00	7.87
176...	1.76	2.64	3.52	4.40	5.28	6.16	7.04	7.92
177...	1.77	2.65	3.54	4.42	5.31	6.19	7.08	7.96

True per cent. of proof.	WINE-GALLONS.							
	1	1½	2	2½	3	3½	4	4½
178...	1.78	2.67	3.56	4.45	5.34	6.23	7.12	8.01
179...	1.79	2.68	3.58	4.47	5.37	6.26	7.16	8.05
180...	1.80	2.70	3.60	4.50	5.40	6.30	7.20	8.10
181...	1.81	2.71	3.62	4.52	5.43	6.33	7.24	8.14
182...	1.82	2.73	3.64	4.55	5.46	6.37	7.28	8.19
183...	1.83	2.74	3.66	4.57	5.49	6.40	7.32	8.23
184...	1.84	2.76	3.68	4.60	5.52	6.44	7.36	8.28
185...	1.85	2.77	3.70	4.62	5.55	6.47	7.40	8.32
186...	1.86	2.79	3.72	4.65	5.58	6.51	7.44	8.37
187...	1.87	2.80	3.74	4.67	5.61	6.54	7.48	8.41
188...	1.88	2.82	3.76	4.70	5.64	6.58	7.52	8.46
189...	1.89	2.83	3.78	4.72	5.67	6.61	7.56	8.50
190...	1.90	2.85	3.80	4.75	5.70	6.65	7.60	8.55
191...	1.91	2.86	3.82	4.77	5.73	6.68	7.64	8.59
192...	1.92	2.88	3.84	4.80	5.76	6.72	7.68	8.64
193...	1.93	2.89	3.86	4.82	5.79	6.75	7.72	8.68
194...	1.94	2.91	3.88	4.85	5.82	6.79	7.76	8.73
195...	1.95	2.92	3.90	4.87	5.85	6.82	7.80	8.77
196...	1.96	2.94	3.92	4.90	5.88	6.86	7.84	8.82
197...	1.97	2.95	3.94	4.92	5.91	6.89	7.88	8.86
198...	1.98	2.96	3.96	4.95	5.94	6.93	7.92	8.91
199...	1.99	2.98	3.98	4.97	5.97	6.96	7.96	8.95
200...	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
40	2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40
41	2.05	2.25	2.46	2.66	2.87	3.07	3.28	3.48
42	2.10	2.31	2.52	2.73	2.94	3.15	3.36	3.57
43	2.15	2.36	2.58	2.79	3.01	3.22	3.44	3.65
44	2.20	2.42	2.64	2.86	3.08	3.30	3.52	3.74
45	2.25	2.47	2.70	2.92	3.15	3.37	3.60	3.82
46	2.30	2.53	2.76	2.99	3.22	3.45	3.68	3.91
47	2.35	2.58	2.82	3.05	3.29	3.52	3.76	3.99
48	2.40	2.64	2.88	3.12	3.36	3.60	3.84	4.08
49	2.45	2.69	2.94	3.18	3.43	3.67	3.92	4.16
50	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25
51	2.55	2.80	3.06	3.31	3.57	3.82	4.08	4.33
52	2.60	2.86	3.12	3.38	3.64	3.90	4.16	4.42
53	2.65	2.91	3.18	3.44	3.71	3.97	4.24	4.50
54	2.70	2.97	3.24	3.51	3.78	4.05	4.32	4.59
55	2.75	3.02	3.30	3.57	3.85	4.12	4.40	4.67
56	2.80	3.08	3.36	3.64	3.92	4.20	4.48	4.76
57	2.85	3.13	3.42	3.70	3.99	4.27	4.56	4.84
58	2.90	3.19	3.48	3.77	4.06	4.35	4.64	4.93
59	2.95	3.24	3.54	3.83	4.13	4.42	4.72	5.01
60	3.00	3.30	3.60	3.90	4.20	4.50	4.80	5.10
61	3.05	3.35	3.66	3.97	4.27	4.57	4.88	5.18
62	3.10	3.41	3.72	4.03	4 34	4.65	4.96	5.27
63	3.15	3.46	3.78	4.10	4.41	4.72	5.04	5.35
64	3.20	3.52	3.84	4.16	4.48	4.80	5.12	5.44
65	3.25	3.57	3.90	4.23	4.55	4.87	5.20	5.52
66	3.30	3.63	3.96	4.29	4.62	4.95	5.28	5.61
67	3.35	3.68	4.02	4.36	4.69	5.02	5.36	5.69
68	3.40	3.74	4.08	4.42	4.76	5.10	5.44	5.78
69	3.45	3.79	4.14	4.49	4.83	5.17	5.52	5.86
70	3.50	3.85	4.20	4.55	4.90	5.25	5.60	5.95
71	3.55	3.90	4.26	4.61	4.97	5.32	5.68	6.03
72	3.60	3.96	4.32	4.68	5.04	5.40	5.76	6.12
73	3.65	4.01	4.38	4.74	5.11	5.47	5.84	6.20
74	3.70	4.07	4.44	4.81	5.18	5.55	5.92	6.29
75	3.75	4.12	4.50	4.87	5.25	5.62	6.00	6.37
76	3.80	4.18	4.56	4.94	5.32	5.70	6.08	6.46
77	3.85	4.23	4.62	5.00	5.39	5.77	6.16	6.54
78	3.90	4.29	4.68	5.07	5.46	5.85	6.24	6.63
79	3.95	4.34	4.74	5.13	5.53	5.92	6.32	6.71
80	4.00	4.40	4.80	5.20	5.60	6.00	6.40	6.80
81	4.05	4.45	4.86	5.26	5.67	6.07	6.48	6.88
82	4.10	4.51	4.92	5.33	5.74	6.15	6.56	6.97
83	4.15	4.56	4.98	5.39	5.81	6.22	6.64	7.05
84	4.20	4.62	5.04	5.46	5.88	6.30	6.72	7.14
85	4.25	4.67	5.10	5.52	5.95	6.37	6.80	7.22

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
86...	4.30	4.73	5.16	5.59	6.02	6.45	6.88	7.31
87...	4.35	4.78	5.22	5.65	6.09	6.52	6.96	7.39
88...	4.40	4.84	5.28	5.72	6.16	6.60	7.04	7.48
89...	4.45	4.89	5.34	5.78	6.23	6.67	7.12	7.56
90...	4.50	4.95	5.40	5.85	6.30	6.75	7.20	7.65
91...	4.55	5.00	5.46	5.91	6.37	6.82	7.28	7.73
92...	4.60	5.06	5.52	5.98	6.44	6.90	7.36	7.82
93...	4.65	5.11	5.58	6.04	6.51	6.97	7.44	7.90
94...	4.70	5.17	5.64	6.11	6.58	7.05	7.52	7.99
95...	4.75	5.22	5.70	6.17	6.65	7.12	7.60	8.07
96...	4.80	5.28	5.76	6.24	6.72	7.20	7.68	8.16
97...	4.85	5.33	5.82	6.30	6.79	7.27	7.76	8.24
98...	4.90	5.39	5.88	6.37	6.86	7.35	7.84	8.33
99...	4.95	5.44	5.94	6.43	6.93	7.42	7.92	8.41
100...	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
101...	5.05	5.55	6.06	6.56	7.07	7.57	8.08	8.58
102...	5.10	5.61	6.12	6.63	7.14	7.65	8.16	8.67
103...	5.15	5.66	6.18	6.69	7.21	7.72	8.24	8.75
104...	5.20	5.72	6.24	6.76	7.28	7.80	8.32	8.84
105...	5.25	5.77	6.30	6.82	7.35	7.87	8.40	8.92
106...	5.30	5.83	6.36	6.89	7.42	7.95	8.48	9.01
107...	5.35	5.88	6.42	6.95	7.49	8.02	8.56	9.09
108...	5.40	5.94	6.48	7.02	7.56	8.10	8.64	9.18
109...	5.45	5.99	6.54	7.08	7.63	8.17	8.72	9.26
110...	5.50	6.05	6.60	7.15	7.70	8.25	8.80	9.35
111...	5.55	6.10	6.66	7.21	7.77	8.32	8.88	9.43
112...	5.60	6.16	6.72	7.28	7.84	8.40	8.96	9.52
113...	5.65	6.21	6.78	7.34	7.91	8.47	9.04	9.60
114...	5.70	6.27	6.84	7.41	7.98	8.55	9.12	9.69
115...	5.75	6.32	6.90	7.47	8.05	8.62	9.20	9.77
116...	5.80	6.38	6.96	7.54	8.12	8.70	9.28	9.86
117...	5.85	6.43	7.02	7.60	8.19	8.77	9.36	9.94
118...	5.90	6.49	7.08	7.67	8.26	8.85	9.44	10.03
119...	5.95	6.54	7.14	7.73	8.33	8.92	9.52	10.11
120...	6.00	6.60	7.20	7.80	8.40	9.00	9.60	10.20
121...	6.05	6.65	7.26	7.86	8.47	9.07	9.68	10.28
122...	6.10	6.71	7.32	7.93	8.54	9.15	9.76	10.37
123...	6.15	6.76	7.38	7.99	8.61	9.22	9.84	10.45
124...	6.20	6.82	7.44	8.06	8.68	9.30	9.92	10.54
125...	6.25	6.87	7.50	8.12	8.75	9.37	10.00	10.62
126...	6.30	6.93	7.56	8.19	8.82	9.45	10.08	10.71
127...	6.35	6.98	7.62	8.25	8.89	9.52	10.16	10.79
128...	6.40	7.04	7.68	8.32	8.96	9.60	10.24	10.88
129...	6.45	7.09	7.74	8.38	9.03	9.67	10.32	10.96
130...	6.50	7.15	7.80	8.45	9.10	9.75	10.40	11.05
131...	6.55	7.20	7.86	8.51	9.17	9.82	10.48	11.13

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
132...	6.60	7.26	7.92	8.58	9.24	9.90	10.56	11.22
133...	6.65	7.31	7.98	8.64	9.31	9.97	10.64	11.30
134...	6.70	7.37	8.04	8.71	9.38	10.05	10.72	11.39
135...	6.75	7.42	8.10	8.77	9.45	10.12	10.80	11.47
136...	6.80	7.48	8.16	8.84	9.52	10.20	10.88	11.56
137...	6.85	7.53	8.22	8.90	9.59	10.27	10.96	11.64
138...	6.90	7.59	8.28	8.97	9.66	10.35	11.04	11.73
139...	6.95	7.64	8.34	9.03	9.73	10.42	11.12	11.81
140...	7.00	7.70	8.40	9.10	9.80	10.50	11.20	11.90
141...	7.05	7.75	8.46	9.16	9.87	10.57	11.28	11.98
142...	7.10	7.81	8.52	9.23	9.94	10.65	11.36	12.07
143...	7.15	7.86	8.58	9.29	10.01	10.72	11.44	12.15
144...	7.20	7.92	8.64	9.36	10.08	10.80	11.52	12.24
145...	7.25	7.97	8.70	9.42	10.15	10.87	11.60	12.32
146...	7.30	8.03	8.76	9.49	10.22	10.95	11.68	12.41
147...	7.35	8.08	8.82	9.55	10.29	11.02	11.76	12.49
148...	7.40	8.14	8.88	9.62	10.36	11.10	11.84	12.58
149...	7.45	8.19	8.94	9.68	10.43	11.17	11.92	12.66
150...	7.50	8.25	9.00	9.75	10.50	11.25	12.00	12.75
151...	7.55	8.30	9.06	9.81	10.57	11.32	12.08	12.83
152...	7.60	8.36	9.12	9.88	10.64	11.40	12.16	12.92
153...	7.65	8.41	9.18	9.94	10.71	11.47	12.24	13.00
154...	7.70	8.47	9.24	10.01	10.78	11.55	12.32	13.09
155...	7.75	8.52	9.30	10.07	10.85	11.62	12.40	13.17
156...	7.80	8.58	9.36	10.14	10.92	11.70	12.48	13.26
157...	7.85	8.63	9.42	10.20	10.99	11.77	12.56	13.34
158...	7.90	8.69	9.48	10.27	11.06	11.85	12.64	13.43
159 ..	7.95	8.74	9.54	10.33	11.13	11.92	12.72	13.51
160...	8.00	8.80	9.60	10.40	11.20	12.00	12.80	13.60
161...	8.05	8.85	9.66	10.46	11.27	12.07	12.88	13.68
162...	8.10	8.91	9.72	10.53	11.34	12.15	12.96	13.77
163...	8.15	8.96	9.78	10.59	11.41	12.22	13.04	13.85
164...	8.20	9.02	9.84	10.66	11.48	12.30	13.12	13.94
165...	8.25	9.07	9.90	10.72	11.55	12.37	13.20	14.02
166...	8.30	9.13	9.96	10.79	11.62	12.45	13.28	14.11
167...	8.35	9.18	10.02	10.85	11.69	12.52	13.36	14.19
168...	8.40	9.24	10.08	10.92	11.76	12.60	13.44	14.28
169...	8.45	9.29	10.14	10.98	11.83	12.67	13.52	14.36
170...	8.50	9.35	10.20	11.05	11.90	12.75	13.60	14.45
171...	8.55	9.40	10.26	11.11	11.97	12.82	13.68	14.53
172...	8.60	9.46	10.32	11.18	12.04	12.90	13.76	14.62
173...	8.65	9.51	10.38	11.24	12.11	12.97	13.84	14.70
174...	8.70	9.57	10.44	11.31	12.18	13.05	13.92	14.79
175...	8.75	9.62	10.50	11.37	12.25	13.12	14.00	14.87
176...	8.80	9.68	10.56	11.44	12.32	13.20	14.08	14.96
177...	8.85	9.73	10.62	11.50	12.39	13.27	14.16	15.04

True per cent. of proof.	WINE-GALLONS.							
	5	5½	6	6½	7	7½	8	8½
178...	8.90	9.79	10.68	11.57	12.46	13.35	14.24	15.13
179...	8.95	9.84	10.74	11.63	12.53	13.42	14.32	15.21
180...	9.00	9.90	10.80	11.70	12.60	13.50	14.40	15.30
181...	9.05	9.95	10.86	11.76	12.67	13.57	14.48	15.38
182...	9.10	10.01	10.92	11.83	12.74	13.65	14.56	15.47
183...	9.15	10.06	10.98	11.89	12.81	13.72	14.64	15.55
184...	9.20	10.12	11.04	11.96	12.88	13.80	14.72	15.64
185...	9.25	10.17	11.10	12.02	12.95	13.87	14.80	15.72
186...	9.30	10.23	11.16	12.09	13.02	13.95	14.88	15.81
187...	9.35	10.28	11.22	12.15	13.09	14.02	14.96	15.89
188...	9.40	10.34	11.28	12.22	13.16	14.10	15.04	15.98
189...	9.45	10.39	11.34	12.28	13.23	14.17	15.12	16.06
190...	9.50	10.45	11.40	12.35	13.30	14.25	15.20	16.15
191...	9.55	10.50	11.46	12.41	13.37	14.32	15.28	16.23
192...	9.60	10.56	11.52	12.48	13.44	14.40	15.36	16.32
193...	9.65	10.61	11.58	12.54	13.51	14.47	15.44	16.40
194...	9.70	10.67	11.64	12.61	13.58	14.55	15.52	16.49
195...	9.75	10.72	11.70	12.67	13.65	14.62	15.60	16.57
196...	9.80	10.78	11.76	12.74	13.72	14.70	15.68	16.66
197...	9.85	10.83	11.82	12.80	13.79	14.77	15.76	16.74
198...	9.90	10.89	11.88	12.87	13.86	14.85	15.84	16.83
199...	9.95	10.94	11.94	12.93	13.93	14.92	15.92	16.91
200...	10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
40....	3.60	3.80	4.00	4.20	4.40	4.60	4.80	5.00
41....	3.69	3.89	4.10	4.30	4.51	4.71	4.92	5.12
42....	3.78	3.99	4.20	4.41	4.62	4.83	5.04	5.25
43....	3.87	4.08	4.30	4.51	4.73	4.94	5.16	5.37
44....	3.96	4.18	4.40	4.62	4.84	5.06	5.28	5.50
45....	4.05	4.27	4.50	4.72	4.95	5.17	5.40	5.62
46....	4.14	4.37	4.60	4.83	5.06	5.29	5.52	5.75
47....	4.23	4.46	4.70	4.93	5.17	5.40	5.64	5.87
48....	4.32	4.56	4.80	5.04	5.28	5.52	5.76	6.00
49....	4.41	4.65	4.90	5.14	5.39	5.63	5.88	6.12
50....	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25
51....	4.59	4.84	5.10	5.35	5.61	5.86	6.12	6.37
52....	4.68	4.94	5.20	5.46	5.72	5.98	6.24	6.50
53....	4.77	5.03	5.30	5.56	5.83	6.09	6.36	6.62
54....	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75
55....	4.95	5.22	5.50	5.77	6.05	6.32	6.60	6.87
56....	5.04	5.32	5.60	5.88	6.16	6.44	6.72	7.00
57....	5.13	5.41	5.70	5.98	6.27	6.55	6.84	7.12
58....	5.22	5.51	5.80	6.09	6.38	6.67	6.96	7.25
59....	5.31	5.60	5.90	6.19	6.49	6.78	7.08	7.37
60....	5.40	5.70	6.00	6.30	6.60	6.90	7.20	7.50
61....	5.49	5.79	6.10	6.40	6.71	7.01	7.32	7.62
62....	5.58	5.89	6.20	6.51	6.82	7.13	7.44	7.75
63....	5.67	5.98	6.30	6.61	6.93	7.24	7.56	7.87
64....	5.76	6.08	6.40	6.72	7.04	7.36	7.68	8.00
65....	5.85	6.17	6.50	6.82	7.15	7.47	7.80	8.12
66....	5.94	6.27	6.60	6.93	7.26	7.59	7.92	8.25
67....	6.03	6.36	6.70	7.03	7.37	7.70	8.04	8.37
68....	6.12	6.46	6.80	7.14	7.48	7.82	8.16	8.50
69....	6.21	6.55	6.90	7.24	7.59	7.93	8.28	8.62
70....	6.30	6.65	7.00	7.35	7.70	8.05	8.40	8.75
71....	6.39	6.74	7.10	7.45	7.81	8.16	8.52	8.87
72....	6.48	6.84	7.20	7.56	7.92	8.28	8.64	9.00
73....	6.57	6.93	7.30	7.66	8.03	8.39	8.76	9.12
74....	6.66	7.03	7.40	7.77	8.14	8.51	8.88	9.25
75....	6.75	7.12	7.50	7.87	8.25	8.62	9.00	9.37
76....	6.84	7.22	7.60	7.98	8.36	8.74	9.12	9.50
77....	6.93	7.31	7.70	8.08	8.47	8.85	9.24	9.62
78....	7.02	7.41	7.80	8.19	8.58	8.97	9.36	9.75
79....	7.11	7.50	7.90	8.29	8.69	9.08	9.48	9.87
80....	7.20	7.60	8.00	8.40	8.80	9.20	9.60	10.00
81....	7.29	7.69	8.10	8.50	8.91	9.31	9.72	10.12
82....	7.38	7.79	8.20	8.61	9.02	9.43	9.84	10.25
83....	7.47	7.88	8.30	8.71	9.13	9.54	9.96	10.37
84....	7.56	7.98	8.40	8.82	9.24	9.66	10.08	10.50
85....	7.65	8.07	8.50	8.92	9.35	9.77	10.20	10.62

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
86...	7.74	8.17	8.60	9.03	9.46	9.89	10.32	10.75
87...	7.83	8.26	8.70	9.13	9.57	10.00	10.44	10.87
88...	7.92	8.36	8.80	9.24	9.68	10.12	10.56	11.00
89...	8.01	8.45	8.90	9.34	9.79	10.23	10.68	11.12
90...	8.10	8.55	9.00	9.45	9.90	10.35	10.80	11.25
91...	8.19	8.64	9.10	9.55	10.01	10.46	10.92	11.37
92...	8.28	8.74	9.20	9.66	10.12	10.58	11.04	11.50
93...	8.37	8.83	9.30	9.76	10.23	10.69	11.16	11.62
94...	8.46	8.93	9.40	9.87	10.34	10.81	11.28	11.75
95...	8.55	9.02	9.50	9.97	10.45	10.92	11.40	11.87
96...	8.64	9.12	9.60	10.08	10.56	11.04	11.52	12.00
97...	8.73	9.21	9.70	10.18	10.67	11.15	11.64	12.12
98...	8.82	9.31	9.80	10.29	10.78	11.27	11.76	12.25
99...	8.91	9.40	9.90	10.39	10.89	11.38	11.88	12.37
100...	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50
101...	9.09	9.59	10.10	10.60	11.11	11.61	12.12	12.62
102...	9.18	9.69	10.20	10.71	11.22	11.73	12.24	12.75
103...	9.27	9.78	10.30	10.81	11.33	11.84	12.36	12.87
104...	9.36	9.88	10.40	10.92	11.44	11.96	12.48	13.00
105...	9.45	9.97	10.50	11.02	11.55	12.07	12.60	13.12
106...	9.54	10.07	10.60	11.13	11.66	12.19	12.72	13.25
107...	9.63	10.16	10.70	11.23	11.77	12.30	12.84	13.37
108...	9.72	10.26	10.80	11.34	11.88	12.42	12.96	13.50
109...	9.81	10.35	10.90	11.44	11.99	12.53	13.08	13.62
110...	9.90	10.45	11.00	11.55	12.10	12.65	13.20	13.75
111...	9.99	10.54	11.10	11.65	12.21	12.76	13.32	13.87
112...	10.08	10.64	11.20	11.76	12.32	12.88	13.44	14.00
113...	10.17	10.73	11.30	11.86	12.43	12.99	13.56	14.12
114...	10.26	10.83	11.40	11.97	12.54	13.11	13.68	14.25
115...	10.35	10.92	11.50	12.07	12.65	13.22	13.80	14.37
116...	10.44	11.02	11.60	12.18	12.76	13.34	13.92	14.50
117...	10.53	11.11	11.70	12.28	12.87	13.45	14.04	14.62
118...	10.62	11.21	11.80	12.39	12.98	13.57	14.16	14.75
119...	10.71	11.30	11.90	12.49	13.09	13.68	14.28	14.87
120...	10.80	11.40	12.00	12.60	13.20	13.80	14.40	15.00
121...	10.89	11.49	12.10	12.70	13.31	13.91	14.52	15.12
122...	10.98	11.59	12.20	12.81	13.42	14.03	14.64	15.25
123...	11.07	11.68	12.30	12.91	13.53	14.14	14.76	15.37
124...	11.16	11.78	12.40	13.02	13.64	14.26	14.88	15.50
125...	11.25	11.87	12.50	13.12	13.75	14.37	15.00	15.62
126...	11.34	11.97	12.60	13.23	13.86	14.49	15.12	15.75
127...	11.43	12.06	12.70	13.33	13.97	14.60	15.24	15.87
128...	11.52	12.16	12.80	13.44	14.08	14.72	15.36	16.00
129...	11 61	12.25	12.90	13.54	14.19	14.83	15.48	16.12
130...	11 70	12.35	13.00	13.65	14.30	14.95	15.60	16.25
131...	11.79	12.44	13.10	13.75	14.41	15.06	15.72	16.37

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
132...	11.88	12.54	13.20	13.86	14.52	15.18	15.84	16.50
133...	11.97	12.63	13.30	13.96	14.63	15.29	15.96	16.62
134...	12.06	12.73	13.40	14.07	14.74	15.41	16.08	16.75
135...	12.15	12.82	13.50	14.17	14.85	15.52	16.20	16.87
136...	12.24	12.92	13.60	14.28	14.96	15.64	16.32	17.00
137...	12.33	13.01	13.70	14.38	15.07	15.75	16.44	17.12
138...	12.42	13.11	13.80	14.49	15.18	15.87	16.56	17.25
139...	12.51	13.20	13.90	14.59	15.29	15.98	16.68	17.37
140...	12.60	13.30	14.00	14.70	15.40	16.10	16.80	17.50
141...	12.69	13.39	14.10	14.80	15.51	16.21	16.92	17.62
142...	12.78	13.49	14.20	14.91	15.62	16.33	17.04	17.75
143...	12.87	13.58	14.30	15.01	15.73	16.44	17.16	17.87
144...	12.96	13.68	14.40	15.12	15.84	16.56	17.28	18.00
145...	13.05	13.77	14.50	15.22	15.95	16.67	17.40	18.12
146...	13.14	13.87	14.60	15.33	16.06	16.79	17.52	18.25
147...	13.23	13.96	14.70	15.43	16.17	16.90	17.64	18.37
148...	13.32	14.06	14.80	15.54	16.28	17.02	17.76	18.50
149...	13.41	14.15	14.90	15.64	16.39	17.13	17.88	18.62
150...	13.50	14.25	15.00	15.75	16.50	17.25	18.00	18.75
151...	13.59	14.34	15.10	15.85	16.61	17.36	18.12	18.87
152...	13.68	14.44	15.20	15.96	16.72	17.48	18.24	19.00
153...	13.77	14.53	15.30	16.06	16.83	17.59	18.36	19.12
154...	13.86	14.63	15.40	16.17	16.94	17.71	18.48	19.25
155...	13.95	14.72	15.50	16.27	17.05	17.82	18.60	19.37
156...	14.04	14.82	15.60	16.38	17.16	17.94	18.72	19.50
157...	14.13	14.91	15.70	16.48	17.27	18.05	18.84	19.62
158...	14.22	15.01	15.80	16.59	17.38	18.17	18.96	19.75
159...	14.31	15.10	15.90	16.69	17.49	18.28	19.08	19.87
160...	14.40	15.20	16.00	16.80	17.60	18.40	19.20	20.00
161...	14.49	15.29	16.10	16.90	17.71	18.51	19.32	20.12
162...	14.58	15.39	16.20	17.01	17.82	18.63	19.44	20.25
163...	14.67	15.48	16.30	17.11	17.93	18.74	19.56	20.37
164...	14.76	15.58	16.40	17.22	18.04	18.86	19.68	20.50
165...	14.85	15.67	16.50	17.32	18.15	18.97	19.80	20.62
166...	14.94	15.77	16.60	17.43	18.26	19.09	19.92	20.75
167...	15.03	15.86	16.70	17.53	18.37	19.20	20.04	20.87
168...	15.12	15.96	16.80	17.64	18.48	19.32	20.16	21.00
169...	15.21	16.05	16.90	17.74	18.59	19.43	20.28	21.12
170...	15.30	16.15	17.00	17.85	18.70	19.55	20.40	21.25
171...	15.39	16.24	17.10	17.95	18.81	19.66	20.52	21.37
172...	15.48	16.34	17.20	18.06	18.92	19.78	20.64	21.50
173...	15.57	16.43	17.30	18.16	19.03	19.89	20.76	21.62
174...	15.66	16.53	17.40	18.27	19.14	20.01	20.88	21.75
175...	15.75	16.62	17.50	18.37	19.25	20.12	21.00	21.87
176...	15.84	16.72	17.60	18.48	19.36	20.24	21.12	22.00
177...	15.93	16.81	17.70	18.58	19.47	20.35	21.24	22.12

True per cent. of proof.	WINE-GALLONS.							
	9	9½	10	10½	11	11½	12	12½
178...	16.02	16.91	17.80	18.69	19.58	20.47	21.36	22.25
179...	16.11	17.00	17.90	18.79	19.69	20.58	21.48	22.37
180...	16.20	17.10	18.00	18.90	19.80	20.70	21.60	22.50
181...	16.29	17.19	18.10	19.00	19.91	20.81	21.72	22.62
182...	16.38	17.29	18.20	19.11	20.02	20.93	21.84	22.75
183...	16.47	17.38	18.30	19.21	20.13	21.04	21.96	22.87
184...	16.56	17.48	18.40	19.32	20.24	21.16	22.08	23.00
185...	16.65	17.57	18.50	19.42	20.35	21.27	22.20	23.12
186...	16.74	17.67	18.60	19.53	20.46	21.39	22.32	23.25
187...	16.83	17.76	18.70	19.63	20.57	21.50	22.44	23.37
188...	16.92	17.86	18.80	19.74	20.68	21.62	22.56	23.50
189...	17.01	17.95	18.90	19.84	20.79	21.73	22.68	23.62
190...	17.10	18.05	19.00	19.95	20.90	21.85	22.80	23.75
191...	17.19	18.14	19.10	20.05	21.01	21.96	22.92	23.87
192...	17.28	18.24	19.20	20.16	21.12	22.08	23.04	24.00
193...	17.37	18.33	19.30	20.26	21.23	22.19	23.16	24.12
194...	17.46	18.43	19.40	20.37	21.34	22.31	23.28	24.25
195...	17.55	18.52	19.50	20.47	21.45	22.42	23.40	24.37
196...	17.64	18.62	19.60	20.58	21.56	22.54	23.52	24.50
197...	17.73	18.71	19.70	20.68	21.67	22.65	23.64	24.62
198...	17.82	18.81	19.80	20.79	21.78	22.77	23.76	24.75
199...	17.91	18.90	19.90	20.89	21.89	22.88	23.88	24.87
200...	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
40....	5.20	5.40	5.60	5.80	6.00	6.20	6.40	6.60
41....	5.33	5.53	5.74	5.94	6.15	6.35	6.56	6.76
42....	5.46	5.67	5.88	6.09	6.30	6.51	6.72	6.93
43....	5.59	5.80	6.02	6.23	6.45	6.66	6.88	7.09
44....	5.72	5.94	6.16	6.38	6.60	6.82	7.04	7.26
45....	5.85	6.07	6.30	6.52	6.75	6.97	7.20	7.42
46....	5.98	6.21	6.44	6.67	6.90	7.13	7.36	7.59
47....	6.11	6.34	6.58	6.81	7.05	7.28	7.52	7.75
48....	6.24	6.48	6.72	6.96	7.20	7.44	7.68	7.92
49....	6.37	6.61	6.86	7.10	7.35	7.59	7.84	8.08
50....	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25
51....	6.63	6.88	7.14	7.39	7.65	7.90	8.16	8.41
52....	6.76	7.02	7.28	7.54	7.80	8.06	8.32	8.58
53....	6.89	7.15	7.42	7.68	7.95	8.21	8.48	8.74
54....	7.02	7.29	7.56	7.83	8.10	8.37	8.64	8.91
55....	7.15	7.42	7.70	7.97	8.25	8.52	8.80	9.07
56....	7.28	7.56	7.84	8.12	8.40	8.68	8.96	9.24
57....	7.41	7.69	7.98	8.26	8.55	8.83	9.12	9.40
58....	7.54	7.83	8.12	8.41	8.70	8.99	9.28	9.57
59....	7.67	7.96	8.26	8.55	8.85	9.14	9.44	9.73
60....	7.80	8.10	8.40	8.70	9.00	9.30	9.60	9.90
61....	7.93	8.23	8.54	8.84	9.15	9.45	9.76	10.06
62....	8.06	8.37	8.68	8.99	9.30	9.61	9.92	10.23
63....	8.19	8.50	8.82	9.13	9.45	9.76	10.08	10.39
64....	8.32	8.64	8.96	9.28	9.60	9.92	10.24	10.56
65....	8.45	8.77	9.10	9.42	9.75	10.07	10.40	10.72
66....	8.58	8.91	9.24	9.57	9.90	10.23	10.56	10.89
67....	8.71	9.04	9.38	9.71	10.05	10.38	10.72	11.05
68....	8.84	9.18	9.52	9.86	10.20	10.54	10.88	11.22
69....	8.97	9.31	9.66	10.00	10.35	10.69	11.04	11.38
70....	9.10	9.45	9.80	10.15	10.50	10.85	11.20	11.55
71....	9.23	9.58	9.94	10.29	10.65	11.00	11.36	11.71
72....	9.36	9.72	10.08	10.44	10.80	11.16	11.52	11.88
73....	9.49	9.85	10.22	10.58	10.95	11.31	11.68	12.04
74....	9.62	9.99	10.36	10.73	11.10	11.47	11.84	12.21
75....	9.75	10.12	10.50	10.87	11.25	11.62	12.00	12.37
76....	9.88	10.26	10.64	11.02	11.40	11.78	12.16	12.54
77....	10.01	10.39	10.78	11.16	11.55	11.93	12.32	12.70
78....	10.14	10.53	10.92	11.31	11.70	12.09	12.48	12.87
79....	10.27	10.66	11.06	11.45	11.85	12.24	12.64	13.03
80....	10.40	10.80	11.20	11.60	12.00	12.40	12.80	13.20
81....	10.53	10.93	11.34	11.74	12.15	12.55	12.96	13.36
82....	10.66	11.07	11.48	11.89	12.30	12.71	13.12	13.53
83....	10.79	11.20	11.62	12.03	12.45	12.86	13.28	13.69
84....	10.92	11.34	11.76	12.18	12.60	13.02	13.44	13.86
85....	11.05	11.47	11.90	12.32	12.75	13.17	13.60	14.02

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
86...	11.18	11.61	12.04	12.47	12.90	13.33	13.76	14.19
87...	11.31	11.74	12.18	12.61	13.05	13.48	13.92	14.35
88...	11.44	11.88	12.32	12.76	13.20	13.64	14.08	14.52
89...	11.57	12.01	12.46	12.90	13.35	13.79	14.24	14.68
90...	11.70	12.15	12.60	13.05	13.50	13.95	14.40	14.85
91...	11.83	12.28	12.74	13.19	13.65	14.10	14.56	15.01
92...	11.96	12.42	12.88	13.34	13.80	14.26	14.72	15.18
93...	12.09	12.55	13.02	13.48	13.95	14.41	14.88	15.34
94...	12.22	12.69	13.16	13.63	14.10	14.57	15.04	15.51
95...	12.35	12.82	13.30	13.77	14.25	14.72	15.20	15.67
96...	12.48	12.96	13.44	13.92	14.40	14.88	15.36	15.84
97...	12.61	13.09	13.58	14.06	14.55	15.03	15.52	16.00
98...	12.74	13.23	13.72	14.21	14.70	15.19	15.68	16.17
99...	12.87	13.36	13.86	14.35	14.85	15.34	15.84	16.33
100...	13.00	13.50	14.00	14.50	15.00	15.50	16.00	16.50
101...	13.13	13.63	14.14	14.64	15.15	15.65	16.16	16.66
102...	13.26	13.77	14.28	14.79	15.30	15.81	16.32	16.83
103...	13.39	13.90	14.42	14.93	15.45	15.96	16.48	16.99
104...	13.52	14.04	14.56	15.08	15.60	16.12	16.64	17.16
105...	13.65	14.17	14.70	15.22	15.75	16.27	16.80	17.32
106...	13.78	14.31	14.84	15.37	15.90	16.43	16.96	17.49
107...	13.91	14.44	14.98	15.51	16.05	16.58	17.12	17.65
108...	14.04	14.58	15.12	15.66	16.20	16.74	17.28	17.82
109...	14.17	14.71	15.26	15.80	16.35	16.89	17.44	17.98
110...	14.30	14.85	15.40	15.95	16.50	17.05	17.60	18.15
111...	14.43	14.98	15.54	16.09	16.65	17.20	17.76	18.31
112...	14.56	15.12	15.68	16.24	16.80	17.36	17.92	18.48
113...	14.69	15.25	15.82	16.38	16.95	17.51	18.08	18.64
114...	14.82	15.39	15.96	16.53	17.10	17.67	18.24	18.81
115...	14.95	15.52	16.10	16.67	17.25	17.82	18.40	18.97
116...	15.08	15.66	16.24	16.82	17.40	17.98	18.56	19.14
117...	15.21	15.79	16.38	16.96	17.55	18.13	18.72	19.30
118...	15.34	15.93	16.52	17.11	17.70	18.29	18.88	19.47
119...	15.47	16.06	16.66	17.25	17.85	18.44	19.04	19.63
120...	15.60	16.20	16.80	17.40	18.00	18.60	19.20	19.80
121...	15.73	16.33	16.94	17.54	18.15	18.75	19.36	19.96
122...	15.86	16.47	17.08	17.69	18.30	18.91	19.52	20.13
123...	15.99	16.60	17.22	17.83	18.45	19.06	19.68	20.29
124...	16.12	16.74	17.36	17.98	18.60	19.22	19.84	20.46
125...	16.25	16.87	17.50	18.12	18.75	19.37	20.00	20.62
126...	16.38	17.01	17.64	18.27	18.90	19.53	20.16	20.79
127...	16.51	17.14	17.78	18.42	19.05	19.68	20.32	20.95
128...	16.64	17.28	17.92	18.56	19.20	19.84	20.48	21.12
129...	16.77	17.41	18.06	18.71	19.35	19.99	20.64	21.28
130...	16.90	17.55	18.20	18.85	19.50	20.15	20.80	21.45
131...	17.03	17.68	18.34	19.00	19.65	20.30	20.96	21.61

True per cent. of proof.	WINE-GALLONS.							
	13	13½	14	14½	15	15½	16	16½
132...	17.16	17.82	18.48	19.14	19.80	20.46	21.12	21.78
133...	17.29	17.95	18.62	19.29	19.95	20.61	21.28	21.94
134...	17.42	18.09	18.76	19.43	20.10	20.77	21.44	22.11
135...	17.55	18.22	18.90	19.58	20.25	20.92	21.60	22.27
136...	17.68	18.36	19.04	19.72	20.40	21.08	21.76	22.44
137...	17.81	18.49	19.18	19.87	20.55	21.23	21.92	22.60
138...	17.94	18.63	19.32	20.01	20.70	21.39	22.08	22.77
139...	18.07	18.76	19.46	20.16	20.85	21.54	22.24	22.93
140...	18.20	18.90	19.60	20.30	21.00	21.70	22.40	23.10
141...	18.33	19.03	19.74	20.45	21.15	21.85	22.56	23.26
142...	18.46	19.17	19.88	20.59	21.30	22.01	22.72	23.43
143...	18.59	19.30	20.02	20.74	21.45	22.16	22.88	23.59
144...	18.72	19.44	20.16	20.88	21.60	22.32	23.04	23.76
145...	18.85	19.57	20.30	21.03	21.75	22.47	23.20	23.92
146...	18.98	19.71	20.44	21.17	21.90	22.63	23.36	24.09
147...	19.11	19.84	20.58	21.32	22.05	22.78	23.52	24.25
148...	19.24	19.98	20.72	21.46	22.20	22.94	23.68	24.42
149...	19.37	20.11	20.86	21.61	22.35	23.09	23.84	24.58
150...	19.50	20.25	21.00	21.75	22.50	23.25	24.00	24.75
151...	19.63	20.38	21.14	21.90	22.65	23.40	24.16	24.91
152...	19.76	20.52	21.28	22.04	22.80	23.56	24.32	25.08
153...	19.89	20.65	21.42	22.19	22.95	23.71	24.48	25.24
154...	20.02	20.79	21.56	22.33	23.10	23.87	24.64	25.41
155...	20.15	20.92	21.70	22.48	23.25	24.02	24.80	25.57
156...	20.28	21.06	21.84	22.62	23.40	24.18	24.96	25.74
157...	20.41	21.19	21.98	22.77	23.55	24.33	25.12	25.90
158...	20.54	21.33	22.12	22.91	23.70	24.49	25.28	26.07
159...	20.67	21.46	22.26	23.06	23.85	24.64	25.44	26.23
160...	20.80	21.60	22.40	23.20	24.00	24.80	25.60	26.40
161...	20.93	21.73	22.54	23.34	24.15	24.95	25.76	26.56
162...	21.06	21.87	22.68	23.49	24.30	25.11	25.92	26.73
163...	21.19	22.00	22.82	23.63	24.45	25.26	26.08	26.89
164...	21.32	22.14	22.96	23.78	24.60	25.42	26.24	27.06
165...	21.45	22.27	23.10	23.92	24.75	25.57	26.40	27.22
166...	21.58	22.41	23.24	24.07	24.90	25.73	26.56	27.39
167...	21.71	22.54	23.38	24.21	25.05	25.88	26.72	27.55
168...	21.84	22.68	23.52	24.36	25.20	26.04	26.88	27.72
169...	21.97	22.81	23.66	24.50	25.35	26.19	27.04	27.88
170...	22.10	22.95	23.80	24.65	25.50	26.35	27.20	28.05
171...	22.23	23.08	23.94	24.79	25.65	26.50	27.36	28.21
172...	22.36	23.22	24.08	24.94	25.80	26.66	27.52	28.38
173...	22.49	23.35	24.22	25.08	25.95	26.81	27.68	28.54
174...	22.62	23.49	24.36	25.23	26.10	26.97	27.84	28.71
175...	22.75	23.62	24.50	25.37	26.25	27.12	28.00	28.87
176...	22.88	23.76	24.64	25.52	26.40	27.28	28.16	29.04
177...	23.01	23.89	24.78	25.66	26.55	27.43	28.32	29.20

True per cent. of proof.	WINE-GALLONS.							
	13	13⅓	14	14½	15	15½	16	16½
178...	23.14	24.03	24.92	25.81	26.70	27.59	28.48	29.37
179...	23.27	24.16	25.06	25.95	26.85	27.74	28.64	29.53
180...	23.40	24.30	25.20	26.10	27.00	27.90	28.80	29.70
181...	23.53	24.43	25.34	26.24	27.15	28.05	28.96	29.86
182...	23.66	24.57	25.48	26.39	27.30	28.21	29.12	30.03
183...	23.79	24.70	25.62	26.53	27.45	28.36	29.28	30.19
184...	23.92	24.84	25.76	26.68	27.60	28.52	29.44	30.36
185...	24.05	24.97	25.90	26.82	27.75	28,67	29.60	30.52
186...	24.18	25.11	26.04	26.97	27.90	28.83	29.76	30.69
187...	24.31	25.24	26.18	27.11	28.05	28.98	29.92	30.85
188...	24.44	25.38	26.32	27.26	28.20	29.14	30.08	31.02
189...	24.57	25.51	26.46	27.40	28.35	29.29	30.24	31.18
190...	24.70	25.65	26.60	27.55	28.50	29.45	30.40	31.35
191...	24.83	25.78	26.74	27.69	28.65	29.60	30.56	31.51
192...	24.96	25.92	26.88	27.84	28.80	29.76	30.72	31.68
193...	25.09	26.02	27.02	27.98	28.95	29.91	30.88	31.84
194...	25.22	26.19	27.16	28.13	29.10	30.07	31.04	32.01
195...	25.35	26.32	27.30	28.27	29.25	30.22	31.20	32.17
196...	25.48	26.46	27.44	28.42	29.40	30.38	31.36	32.34
197...	25.61	26.59	27.58	28.56	29.55	30.53	31.52	32.50
198...	25.74	26.73	27.72	28.71	29.70	30.69	31.68	32.67
199...	25.87	26.86	27.86	28.85	29.85	30.84	31.84	32.83
200...	26.00	27.00	28.00	29.00	30.00	31.00	32.00	33.00

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
40	6.80	7.00	7.20	7.40	7.60	7.80	8.00	8.20
41	6.97	7.17	7.38	7.58	7.79	7.99	8.20	8.40
42	7.14	7.35	7.56	7.77	7.98	8.19	8.40	8.61
43	7.31	7.52	7.74	7.95	8.17	8.38	8.60	8.81
44	7.48	7.70	7.92	8.14	8.36	8.58	8.80	9.02
45	7.65	7.87	8.10	8.32	8.55	8.77	9.00	9.22
46	7.82	8.05	8.28	8.51	8.74	8.97	9.20	9.43
47	7.99	8.22	8.46	8.69	8.93	9.16	9.40	9.63
48	8.16	8.40	8.64	8.88	9.12	9.36	9.60	9.84
49	8.33	8.57	8.82	9.06	9.31	9.55	9.80	10.04
50	8.50	8.75	9.00	9.25	9.50	9.75	10.00	10.25
51	8.67	8.92	9.18	9.43	9.69	9.94	10.20	10.45
52	8.84	9.10	9.36	9.62	9.88	10.14	10.40	10.66
53	9.01	9.27	9.54	9.80	10.07	10.33	10.60	10.86
54	9.18	9.45	9.72	9.99	10.26	10.53	10.80	11.07
55	9.35	9.62	9.90	10.17	10.45	10.72	11.00	11.27
56	9.52	9.80	10.08	10.36	10.64	10.92	11.20	11.48
57	9.69	9.97	10.26	10.54	10.83	11.11	11.40	11.68
58	9.86	10.15	10.44	10.73	11.02	11.31	11.60	11.89
59	10.03	10.32	10.62	10.91	11.21	11.50	11.80	12.09
60	10.20	10.50	10.80	11.10	11.40	11.70	12.00	12.30
61	10.37	10.67	10.98	11.28	11.59	11.89	12.20	12.50
62	10.54	10.85	11.16	11.47	11.78	12.09	12.40	12.71
63	10.71	11.02	11.34	11.65	11.97	12.28	12.60	12.91
64	10.88	11.20	11.52	11.84	12.16	12.48	12.80	13.12
65	11.05	11.37	11.70	12.02	12.35	12.67	13.00	13.32
66	11.22	11.55	11.88	12.21	12.54	12.87	13.20	13.53
67	11.39	11.72	12.06	12.39	12.73	13.06	13.40	13.73
68	11.56	11.90	12.24	12.58	12.92	13.26	13.60	13.94
69	11.73	12.07	12.42	12.76	13.11	13.45	13.80	14.14
70	11.90	12.25	12.60	12.95	13.30	13.65	14.00	14.35
71	12.07	12.42	12.78	13.13	13.49	13.84	14.20	14.55
72	12.24	12.60	12.96	13.32	13.68	14.04	14.40	14.76
73	12.41	12.77	13.14	13.50	13.87	14.23	14.60	14.96
74	12.58	12.95	13.32	13.69	14.06	14.43	14.80	15.17
75	12.75	13.12	13.50	13.87	14.25	14.62	15.00	15.37
76	12.92	13.30	13.68	14.06	14.44	14.82	15.20	15.58
77	13.09	13.47	13.86	14.24	14.63	15.01	15.40	15.78
78	13.26	13.65	14.04	14.43	14.82	15.21	15.60	15.99
79	13.43	13.82	14.22	14.61	15.01	15.40	15.80	16.19
80	13.60	14.00	14.40	14.80	15.20	15.60	16.00	16.40
81	13.77	14.17	14.58	14.98	15.39	15.79	16.20	16.60
82	13.94	14.35	14.76	15.17	15.58	15.99	16.40	16.81
83	14.11	14.52	14.94	15.35	15.77	16.18	16.60	17.01
84	14.28	14.70	15.12	15.54	15.96	16.38	16.80	17.22
85	14.45	14.87	15.30	15.72	16.15	16.57	17.00	17.42

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
86...	14.62	15.05	15.48	15.91	16.34	16.77	17.20	17.63
87...	14.79	15.22	15.66	16.09	16.53	16.96	17.40	17.83
88...	14.96	15.40	15.84	16.28	16.72	17.16	17.60	18.04
89...	15.13	15.57	16.02	16.46	16.91	17.35	17.80	18.24
90...	15.30	15.75	16.20	16.65	17.10	17.55	18.00	18.45
91...	15.47	15.92	16.38	16.83	17.29	17.74	18.20	18.65
92...	15.64	16.10	16.56	17.02	17.48	17.94	18.40	18.86
93...	15.81	16.27	16.74	17.20	17.67	18.13	18.60	19.06
94...	15.98	16.45	16.92	17.39	17.86	18.33	18.80	19.27
95...	16.15	16.62	17.10	17.57	18.05	18.52	19.00	19.47
96...	16.32	16.80	17.28	17.76	18.24	18.72	19.20	19.68
97...	16.49	16.97	17.46	17.94	18.43	18.91	19.40	19.88
98...	16.66	17.15	17.64	18.13	18.62	19.11	19.60	20.09
99...	16.83	[illegible]	17.82	18.31	18.81	19.30	19.80	20.29
100...	17.00	17.50	18.00	18.50	19.00	19.50	20.00	20.50
101...	17.17	17.67	18.18	18.68	19.19	19.69	20.20	20.70
102...	17.34	17.85	18.36	18.87	19.38	19 89	20.40	20.91
103...	17.51	18.02	18.54	19.05	19.57	20.08	20.60	21.11
104...	17.68	18.20	18.72	19.24	19.76	20.28	20.80	21.32
105...	17.85	18.37	18.90	19.42	19.95	20.47	21.00	21.52
106...	18.02	18.55	19.08	19.61	20.14	20.67	21.20	21.73
107...	18.19	18.72	19.26	19.79	20.33	20.86	21.40	21.93
108...	18.36	18.90	19.44	19.98	20.52	21.06	21.60	22.14
109...	18.53	19.07	19.62	20.16	20.71	21.25	21.80	22.34
110...	18.70	19.25	19.80	20.35	20.90	21.45	22.00	22.55
111...	18.87	19.42	19.98	20.53	21.09	21.64	22.20	22.75
112...	19.04	19.60	20.16	20.72	21.28	21.84	22.40	22.96
113...	19.21	19.77	20.34	20.90	21.47	22.03	22.60	23.16
114...	19.38	19.95	20.52	21.09	21.66	22.23	22.80	23.37
115...	19.55	20.12	20.70	21.27	21.85	22.42	23.00	23.57
116...	19.72	20.30	20.88	21.46	22.04	22.62	23.20	23.78
117...	19.89	20.47	21.06	21.64	22.23	22.81	23.40	23.98
118...	20.06	20.65	21.24	21.83	22.42	23.01	23.60	24.19
119...	20.23	20.82	21.42	22.01	22.61	23.20	23.80	24.39
120...	20.40	21.00	21.60	22.20	22.80	23.40	24.00	24.60
121...	20.57	21.17	21.78	22.38	22.99	23.59	24.20	24.80
122...	20.74	21.35	21.96	22.57	23.18	23.79	24.40	25.01
123...	20.91	21.52	22.14	22.75	23.37	23.98	24.60	25.21
124...	21.08	21.70	22.32	22.94	23.56	24.18	24.80	25.42
125...	21.25	21.87	22.50	23.12	23.75	24.37	25.00	25.62
126...	21.42	22.05	22.68	23.31	23.94	24.57	25.20	25.83
127...	21.59	22.22	23.86	23.49	24.13	24.76	25.40	26.03
128...	21.76	22.40	23.04	23.68	24.32	24.96	25.60	26.24
129...	21.93	22.57	23.22	23.86	24.51	25.15	25.80	26.44
130...	22.10	22.75	23.40	24.05	24.70	25.35	26.00	26.65
131...	22.27	22.92	23.58	24.23	24.89	25.54	26.20	26.85

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
132...	22.44	23.10	23.76	24.42	25.08	25.74	26.40	27.06
133...	22.61	23.27	23.94	24.60	25.27	25.93	26.60	27.26
134...	22.78	23.45	24.12	24.79	25.46	26.13	26.80	27.47
135...	22.95	23.62	24.30	24.97	25.65	26.32	27.00	27.67
136...	23.12	23.80	24.48	25.16	25.84	26.52	27.20	27.88
137...	23.29	23.97	24.66	25.34	26.03	26.71	27.40	28.08
138...	23.46	24.15	24.84	25.53	26.22	26.91	27.60	28.29
139...	23.63	24.32	25.02	25.71	26.41	27.10	27.80	28.49
140...	23.80	24.50	25.20	25.90	26.60	27.30	28.00	28.70
141...	23.97	24.67	25.38	26.08	26.79	27.49	28.20	28.90
142...	24.14	24.85	25.56	26.27	26.98	27.69	28.40	29.11
143...	24.31	25.02	25.74	26.45	27.17	27.88	28.60	29.31
144...	24.48	25.20	25.92	26.64	27.36	28.08	28.80	29.52
145...	24.65	25.37	26.10	26.82	27.55	28.27	29.00	29.72
146...	24.82	25.55	26.28	27.01	27.74	28.47	29.20	29.93
147...	24.99	25.72	26.46	27.19	27.93	28.66	29.40	30.13
148...	25.16	25.90	26.64	27.38	28.12	28.86	29.60	30.34
149...	25.33	26.07	26.82	27.56	28.31	29.05	29.80	30.54
150...	25.50	26.25	27.00	27.75	28.50	29.25	30.00	30.75
151...	25.67	26.42	27.18	27.93	28.69	29.44	30.20	30.95
152...	25.84	26.60	27.36	28.12	28.88	29.64	30.40	31.16
153...	26.01	26.77	27.54	28.30	29.07	29.83	30.60	31.36
154...	26.18	26.95	27.72	28.49	29.26	30.03	30.80	31.57
155...	26.35	27.12	27.90	28.67	29.45	30.22	31.00	31.77
156...	26.52	27.30	28.08	28.86	29.64	30.42	31.20	31.98
157...	26.69	27.47	28.26	29.04	29.83	30.61	31.40	32.18
158...	26.86	27.65	28.44	29.23	30.02	30.81	31.60	32.39
159...	27.03	27.82	28.62	29.41	30.21	31.00	31.80	32.59
160...	27.20	28.00	28.80	29.60	30.40	31.20	32.00	32.80
161...	27.37	28.17	28.98	29.78	30.59	31.39	32.20	33.00
162...	27.54	28.35	29.16	29.97	30.78	31.59	32.40	33.21
163...	27.71	28.52	29.34	30.15	30.97	31.78	32.60	33.41
164...	27.88	28.70	29.52	30.34	31.16	31.98	32.80	33.62
165...	28.05	28.87	29.70	30.52	31.35	32.17	33.00	33.82
166...	28.22	29.05	29.88	30.71	31.54	32.37	33.20	34.03
167...	28.39	29.22	30.06	30.89	31.73	32.56	33.40	34.23
168...	28.56	29.40	30.24	31.08	31.92	32.76	33.60	34.44
169...	28.73	29.57	30.42	31.26	32.11	32.95	33.80	34.64
170...	28.90	29.75	30.60	31.45	32.30	33.15	34.00	34.85
171...	29.07	29.92	30.78	31.63	32.49	33.34	34.20	35.05
172...	29.24	30.10	30.96	31.82	32.68	33.54	34.40	35.26
173...	29.41	30.27	31.14	32.00	32.87	33.73	34.60	35.46
174...	29.58	30.45	31.32	32.19	33.06	33.93	34.80	35.67
175...	29.75	30.62	31.50	32.37	33.25	34.12	35.00	35.87
176...	29.92	30.80	31.68	32.56	33.44	34.32	35.20	36.08
177...	30.09	39.97	31.86	32.74	33.63	34.51	35.40	36.28

True per cent. of proof.	WINE-GALLONS.							
	17	17½	18	18½	19	19½	20	20½
178...	30.26	31.15	32.04	32.93	33.82	34.71	35.60	36.49
179...	30.43	31.32	32.22	33.11	34.01	34.90	35.80	36.69
180...	30.60	31.50	32.40	33.30	34.20	35.10	36.00	36.90
181...	30.77	31.67	32.58	33.48	34.39	35.29	36.20	37.10
182...	30.94	31.85	32.76	33.62	34.58	35.49	36.40	37.31
183...	31.11	32.02	32.94	33.85	34.77	35.68	36.60	37.51
184...	31.28	32.20	33.12	34.04	34.96	35.88	36.80	37.72
185...	31.45	32.37	33.30	34.22	35.15	36.07	37.00	37.92
186...	31.62	32.55	33.48	34.41	35.34	36.27	37.20	38.13
187...	31.79	32.72	33.66	34.59	35.53	36.46	37.40	38.33
188...	31.96	32.90	33.84	34.78	35.72	36.66	37.60	38.54
189...	32.13	33.07	34.02	34.96	35.91	36.85	37.80	38.74
190...	32.30	33.25	34.20	35.15	36.10	37.05	38.00	38.95
191...	32.47	33.42	34.38	35.33	36.29	37.24	38.20	39.15
192...	32.64	33.60	34.56	35.52	36.48	37.44	38.40	39.36
193...	32.81	33.77	34.74	35.70	36.67	37.63	38.60	39.56
194...	32.98	33.95	34.92	35.89	36.86	37.83	38.80	39.77
195...	33.15	34.12	35.10	36.07	37.05	38.02	39.00	39.97
196...	33.32	34.30	35.28	36.26	37.24	38.22	39.20	40.18
197...	33.49	34.47	35.46	36.44	37.43	38.41	39.40	40.38
198...	33.66	34.65	35.64	36.63	37.62	38.61	39.60	40.59
199...	33.83	34.82	35.82	36.81	37.81	38.80	39.80	40.79
200...	34.00	35.00	36.00	37.00	38.00	39.00	40.00	41.00

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
40	8.40	8.60	8.80	9.00	9.20	9.40	9.60	9.80
41	8.61	8.81	9.02	9.22	9.43	9.63	9.84	10.04
42	8.82	9.03	9.24	9.45	9.66	9.87	10.08	10.29
43	9.03	9.24	9.46	9.67	9.89	10.10	10.32	10.53
44	9.24	9.46	9.68	9.90	10.12	10.34	10.56	10.78
45	9.45	9.67	9.90	10.12	10.35	10.57	10.80	11.02
46	9.66	9.89	10.12	10.35	10.58	10.81	11.04	11.27
47	9.87	10.10	10.34	10.57	10.81	11.04	11.28	11.51
48	10.08	10.32	10.56	10.80	11.04	11.28	11.52	11.76
49	10.29	10.53	10.78	11.02	11.27	11.51	11.76	12.00
50	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25
51	10.71	10.96	11.22	11.47	11.73	11.98	12.24	12.49
52	10.92	11.18	11.44	11.70	11.96	12.22	12.48	12.74
53	11.13	11 39	11.66	11.92	12.19	12.45	12.72	12.98
54	11.34	11.61	11.88	12.15	12.42	12.69	12.96	13.23
55	11.55	11.82	12.10	12.37	12.65	12.92	13.20	13.47
56	11.76	12.04	12.32	12.60	12.88	13.16	13.44	13.72
57	11.97	12.25	12.54	12.82	13.11	13.39	13.68	13.96
58	12.18	12.47	12.76	13.05	13.34	13.63	13.92	14.21
59	12.39	12.68	12.98	13.27	13.57	13.86	14.16	14.45
60	12.60	12.90	13.20	13.50	13.80	14.10	14.40	14.70
61	12.81	13.11	13.42	13.72	14.03	14.33	14.64	14.94
62	13.02	13.33	13.64	13.95	14.26	14.57	14.88	15.19
63	13.23	13.54	13.86	14.17	14.49	14.80	15.12	15.43
64	13.44	13.76	14.08	14.40	14.72	15.04	15.36	15.68
65	13.65	13.97	14.30	14.62	14.95	15.27	15.60	15.92
66	13.86	14.19	14.52	14.85	15.18	15.51	15.84	16.17
67	14.07	14.40	14.74	15.07	15.41	15.74	16.08	16.41
68	14.28	14.62	14.96	15.30	15.64	15.98	16.32	16.66
69	14.49	14.83	15.18	15.52	15.87	16.21	16.56	16.90
70	14.70	15.05	15.40	15.75	16.10	16.45	16.80	17.15
71	14.91	15.26	15.62	15.97	16.33	16.68	17.04	17.39
72	15.12	15.48	15.84	16.20	16.56	16.92	17.28	17.64
73	15.33	15.69	16.06	16.42	16.79	17.15	17.52	17.88
74	15.54	15.91	16.28	16.65	17.02	17.39	17.76	18.13
75	15.75	16.12	16.50	16.87	17.25	17.62	18.00	18.37
76	15.96	16.34	16.72	17.10	17.48	17.86	18.24	18.62
77	16.17	16.55	16.94	17.32	17.71	18.09	18.48	18.86
78	16.38	16.77	17.16	17.55	17.94	18.33	18.72	19.11
79	16.59	16.98	17.38	17.77	18.17	18.56	18.96	19.35
80	16.80	17.20	17.60	18.00	18.40	18.80	19.20	19.60
81	17.01	17.41	17.82	18.22	18.63	19.03	19.44	19.84
82	17.22	17.63	18.04	18.45	18.86	19.27	19.68	20.09
83	17.43	17.84	18.26	18.67	19.09	19.50	19.92	20.33
84	17.64	18.06	18.48	18.90	19.32	19.74	20.16	20.58
85	17.85	18.27	18.70	19.12	19.55	19.97	20.40	20.82

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
86...	18.06	18.49	18.92	19.35	19.78	20.21	20.64	21.07
87...	18.27	18.70	19.14	19.57	20.01	20.44	20.88	21.31
88...	18.48	18.92	19.36	19.80	20.24	20.68	21.12	21.56
89...	18.69	19.13	19.58	20.02	20.47	20.91	21.36	21.80
90...	18.90	19.35	19.80	20.25	20.70	21.15	21.60	22.05
91...	19.11	19.56	20.02	20.47	20.93	21.38	21.84	22.29
92...	19.32	19.78	20.24	20.70	21.16	21.62	22.08	22.54
93...	19.53	19.99	20.46	20.92	21.39	21.85	22.32	22.78
94...	19.74	20.21	20.68	21.15	21.62	22.09	22.56	23.03
95...	19.95	20.42	20.90	21.37	21.85	22.32	22.80	23.27
96...	20.16	20.64	21.12	21.60	22.08	22.56	23.04	23.52
97...	20.37	20.85	21.34	21.82	22.31	22.79	23.28	23.76
98...	20.58	21.07	21.56	22.05	22.54	23.03	23.52	24.01
99...	20.79	21.28	21.78	22.27	22.77	23.26	23.76	24.25
100...	21.00	21.50	22.00	22.50	23.00	23.50	24.00	24.50
101...	21.21	21.71	22.22	22.72	23.23	23.73	24.24	24.74
102...	21.42	21.93	22.44	22.95	23.46	23.97	24.48	24.99
103...	21.63	22.14	22.66	23.17	23.69	24.20	24.72	25.23
104...	21.84	22.36	22.88	23.40	23.92	24.44	24.96	25.48
105...	22.05	22.57	23.10	23.62	24.15	24.67	25.20	25.72
106...	22.26	22.79	23.32	23.85	24.38	24.91	25.44	25.97
107...	22.47	23.00	23.54	24.07	24.61	25.14	25.68	26.21
108...	22.68	23.22	23.76	24.30	24.84	25.38	25.92	26.46
109...	22.89	23.43	23.98	24.52	25.07	25.61	26.16	26.70
110...	23.10	23.65	24.20	24.75	25.30	25.85	26.40	26.95
111...	23.31	23.86	24.42	24.97	25.53	26.08	26.64	27.19
112...	23.52	24.08	24.64	25.20	25.76	26.32	26.88	27.44
113...	23.73	24.29	24.86	25.42	25.99	26.55	27.12	27.68
114...	23.94	24.51	25.08	25.65	26.22	26.79	27.36	27.93
115...	24.15	24.72	25.30	25.87	26.45	27.02	27.60	28.17
116...	24.36	24.94	25.52	26.10	26.68	27.26	27.84	28.42
117...	24.57	25.15	25.74	26.32	26.91	27.49	28.08	28.66
118...	24.78	25.37	25.96	26.55	27.14	27.73	28.32	28.91
119...	24.99	25.58	26.18	26.77	27.37	27.96	28.56	29.15
120...	25.20	25.80	26.40	27.00	27.60	28.20	28.80	29.40
121...	25.41	26.01	26.62	27.22	27.83	28.43	29.04	29.64
122...	25.62	26.23	26.84	27.45	28.06	28.67	29.28	29 89
123...	25.83	26.44	27.06	27.67	28.29	28.90	29.52	30.13
124...	26.04	26.66	27.28	27.90	28.52	29.14	29.76	30.38
125...	26.25	26.87	27.50	28.12	28.75	29.37	30.00	30.62
126...	26.46	27.09	27.72	28.35	28.98	29.61	30.24	30.87
127...	26.67	27.30	27.94	28.57	29.21	29.84	30.48	31.11
128...	26.88	27.52	28.16	28.80	29.44	30.08	30.72	31.36
129...	27.09	27.73	28.38	29.02	29.67	30.31	30.96	31.60
136...	27 30	27.95	28.60	29.25	29.90	30.55	31.20	31.85
131...	27.51	28.16	28.82	29.47	30.13	30.78	31.44	32.09

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
132...	27.72	28.38	29.04	29.70	30.36	31.02	31.68	32.34
133...	27.93	28.59	29.26	29.92	30.59	31.25	31.92	32.58
134...	28.14	28.81	29.48	30.15	30.82	31.49	32.16	32.83
135...	28.35	29.02	29.70	30.37	31.05	31.72	32.40	33.07
136...	28.56	29.24	29.92	30.60	31.28	31.96	32.64	33.32
137...	28.77	29.45	30.14	30.82	31.51	32.19	32.88	33.56
138...	28.98	29.67	30.36	31.05	31.74	32.43	33.12	33.81
139...	29.19	29.88	30.58	31.27	31.97	32.66	33.36	34.05
140...	29.40	30.10	30.80	31.50	32.20	32.90	33.60	34.30
141...	29.61	30.31	31.02	31.72	32.43	33.13	33.84	34.54
142...	29.82	30.53	31.24	31.95	32.66	33.37	34.08	34.79
143...	30.03	30.74	31.46	32.17	32.89	33.60	34.32	35.03
144...	30.24	30.96	31.68	32.40	33.12	33.84	34.56	35.28
145...	30.45	31.17	31.90	32.62	33.35	34.07	34.80	35.52
146...	30.66	31.39	32.12	32.85	33.58	34.31	35.04	35.77
147...	30.87	31.60	32.34	33.07	33.81	34.54	35.28	36.01
148...	31.08	31.82	32.56	33.30	34.04	34.78	35.52	36.26
149...	31.29	32.03	32.78	33.52	34.27	35.01	35.76	36.50
150...	31.50	32.25	33.00	33.75	34.50	35.25	36.00	36.75
151...	31.71	32.46	33.22	33.97	34.73	35.48	36.24	36.99
152...	31.92	32.68	33.44	34.20	34.96	35.72	36.48	37.24
153...	32.13	32.89	33.66	34.42	35.19	35.95	36.72	37.48
154...	32.34	33.11	33.88	34.65	35.42	36.19	36.96	37.73
155...	32.55	33.32	34.10	34.87	35.65	36.42	37.20	37.97
156...	32.76	33.54	34.32	35.10	35.88	36.66	37.44	38.22
157...	32.97	33.75	34.54	35.32	36.11	36.89	37.68	38.46
158...	33.18	33.97	34.76	35.55	36.34	37.13	37.92	38.71
159...	33.39	34.18	34.98	35.77	36.57	37.36	38.16	38.95
160...	33.60	34.40	35.20	36.00	36.80	37.60	38.40	39.20
161...	33.81	34.61	35.42	36.22	37.03	37.83	38.64	39.44
162...	34.02	34.83	35.64	36.45	37.26	38.07	38.88	39.69
163...	34.23	35.04	35.86	36.67	37.49	38.30	39.12	39.93
164...	34.44	35.26	36.08	36.90	37.72	38.54	39.36	40.18
165...	34.65	35.47	36.30	37.12	37.95	38.77	39.60	40.42
166...	34.86	35.69	36.52	37.35	38.18	39.01	39.84	40.67
167...	35.07	35.90	36.74	37.57	38.41	39.24	40.08	40.91
168...	35.28	36.12	36.96	37.80	38.64	39.48	40.32	41.16
169...	35.49	36.33	37.18	38.02	38.87	39.71	40.56	41.40
170...	35.70	36.55	37.40	38.25	39.10	39.95	40.80	41.65
171...	35.91	36.76	37.62	38.47	39.33	40.18	41.04	41.89
172...	36.12	36.98	37.84	38.70	39.56	40.42	41.28	42.14
173...	36.33	37.19	38.06	38.92	39.79	40.65	41.52	42.38
174...	36.54	37.41	38.28	39.15	40.02	40.89	41.76	42.63
175...	36.75	37.62	38.50	39.37	40.25	41.12	42.00	42.87
176...	36.96	37.84	38.72	39.60	40.48	41.36	42.24	43.12
177...	37.17	38.05	38.94	39.82	40.71	41.59	42.48	43.36

True per cent. of proof.	WINE-GALLONS.							
	21	21½	22	22½	23	23½	24	24½
178...	37.38	38.27	39.16	40.05	40.94	41.83	42.72	43.61
179...	37.59	38.48	39.38	40.27	41.17	42.06	42.96	43.85
180...	37.80	38.70	39.60	40.50	41.40.	42.30	43.20	44.10
181...	38.01	38.91	39.82	40.72	41.63	42.53	43.44	44.34
182...	38.22	39.13	40.04	40.95	41.86	42.77	43.68	44.59
183...	38.43	39.34	40.26	41.17	42.09	43.00	43.92	44.83
184...	38.64	39.56	40.48	41.40	42.32	43.24	44.16	45.08
185...	38.85	39.77	40.70	41.62	42.55	43.47	44.40	45.32
186...	39.06	39.99	40.92	41.85	42.78	43.71	44.64	45.57
187...	39.27	40.20	41.14	42.07	43.01	43.94	44.88	45.81
188...	39.48	40.42	41.36	42.30	43.24	44.18	45.12	46.06
189...	39.69	40.63	41.58	42.52	43.47	44.41	45.36	46.30
190...	39.90	40.85	41.80	42.75	43.70	44.65	45.60	46.55
191...	40.11	41.06	42.02	42.97	43.93	44.88	45.84	46.79
192...	40.32	41.28	42.24	43.20	44.16	45.12	46.08	47.04
193...	40.53	41.49	42.46	43.42	44.39	45.35	46.32	47.28
194...	40.74	41.71	42.68	43.65	44.62	45.59	46.56	47.53
195...	40.95	41.92	42.90	43.87	44.85	45.82	46.80	47.77
196...	41.16	42.14	43.12	44.10	45.08	46.06	47.04	48.02
197...	41.37	42.35	43.34	44.32	45.31	46.29	47.28	48.26
198...	41.58	42.57	43.56	44.55	45.54	46.53	47.52	48.51
199...	41.79	42.78	43.78	44.77	45.77	46.76	47.76	48.75
200...	42.00	43.00	44.00	45.00	46.00	47.00	48.00	49.00

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
40....	10.00	10.20	10.40	10.60	10.80	11.00	11.20	11.40
41....	10.25	10.45	10.66	10.86	11.07	11.27	11.48	11.68
42....	10.50	10.71	10.92	11.13	11.34	11.55	11.76	11.97
43....	10.75	10.96	11.18	11.39	11.61	11.82	12.04	12.25
44....	11.00	11.22	11.44	11.66	11.88	12.10	12.32	12.54
45....	11.25	11.47	11.70	11.92	12.15	12.37	12.60	12.82
46....	11.50	11.73	11.96	12.19	12.42	12.65	12.88	13.11
47....	11.75	11.98	12.22	12.45	12.69	12.92	13.16	13.39
48....	12.00	12.24	12.48	12.72	12.96	13.20	13.44	13.68
49....	12.25	12.49	12.74	12.98	13.23	13.47	13.72	13.96
50....	12.50	12.75	13.00	13.25	13.50	13.75	14.00	14.25
51....	12 75	13.00	13.26	13.51	13.77	14.02	14.28	14.53
52....	13.00	13.26	13.52	13.78	14.04	14.30	14.56	14.82
53....	13.25	13.51	13.78	14.04	14.31	14.57	14.84	15.10
54....	13.50	13.77	14.04	14.31	14.58	14.85	15.12	15.39
55....	13.75	14.02	14.30	14.57	14.85	15.12	15.40	15.67
56....	14.00	14.28	14.56	14.84	15.12	15.40	15.68	15.96
57....	14.25	14.53	14.82	15.10	15.39	15.67	15.96	16.24
58....	14.50	14.79	15.08	15.37	15.66	15.95	16.24	16.53
59....	14.75	15.04	15.34	15.63	15.93	16.22	16.52	16.81
60....	15.00	15.30	15.60	15.90	16.20	16.50	16.80	17.10
61....	15.25	15.55	15.86	16.16	16.47	16.77	17.08	17.38
62....	15.50	15.81	16.12	16.43	16.74	17.05	17.36	17.67
63....	15.75	16.06	16.38	16.69	17.01	17.32	17.64	17.95
64....	16.00	16.32	16.64	16.96	17.28	17.60	17.92	18.24
65....	16.25	16.57	16.90	17.22	17.55	17.87	18.20	18.52
66....	16.50	16.83	17.16	17.49	17.82	18.15	18.48	18.81
67....	16.75	17.08	17.42	17.75	18.09	18.42	18.76	19.09
68....	17.00	17.34	17.68	18.02	18.36	18.70	19.04	19.38
69....	17.25	17.59	17.94	18.28	18.63	18.97	19.32	19.66
70....	17.50	17.85	18.20	18.55	18.90	19.25	19.60	19.95
71....	17.75	18.10	18.46	18.81	19.17	19.52	19.88	20.23
72....	18.00	18.36	18.72	19.08	19.44	19.80	20.16	20.52
73....	18.25	18.61	18.98	19.34	19.71	20.07	20.44	20.80
74....	18.50	18.87	19.24	19.61	19.98	20.35	20.72	21.09
75....	18.75	19.12	19.50	19.87	20.25	20.62	21.00	21.37
76....	19.00	19.38	19.76	20.14	20.52	20.90	21.28	21.66
77....	19.25	19.63	20.02	20.40	20.79	21.17	21.56	21.94
78....	19.50	19.89	20.28	20.67	21.06	21.45	21.84	22.23
79....	19.75	20.14	20.54	20.93	21.33	21.72	22.12	22.51
80....	20.00	20.40	20.80	21.20	21.60	22.00	22.40	22.80
81....	20.25	20.65	21.06	21.46	21.87	22.27	22.68	23.08
82....	20.50	20.91	21.32	21.73	22.14	22.55	22.96	23.37
83....	20.75	21.16	21.58	21.99	22.41	22.82	23.24	23.65
84....	21.00	21.42	21.84	22.26	22.68	23.10	23.52	23.94
85....	21.25	21.67	22.10	22.52	22.95	23.37	23.80	24.22

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
86...	21.50	21.93	22.36	22.79	23.22	23.65	24.08	24.51
87...	21.75	22.18	22.62	23.05	23.49	23.92	24.36	24.79
88...	22.00	22.44	22.88	23.32	23.76	24.20	24.64	25.08
89...	22.25	22.69	23.14	23.58	24.03	24.47	24.92	25.36
90...	22.50	22.95	23.40	23.85	24.30	24.75	25.20	25.65
91...	22.75	23.20	23.66	24.11	24.57	25.02	25.48	25.93
92...	23.00	23.46	23.92	24.38	24.84	25.30	25.76	26.22
93...	23.25	23.71	24.18	24.64	25.11	25.57	26.04	26.50
94...	23.50	23.97	24.44	24.91	25.38	25.85	26.32	26.79
95...	23.75	24.22	24.70	25.17	25.65	26.12	26.60	27.07
96...	24.00	24.48	24.96	25.44	25.92	26.40	26.88	27.36
97...	24.25	24.73	25.22	25.70	26.19	26.67	27.16	27.64
98...	24.50	24.99	25.48	25.97	26.46	26.95	27.44	27.93
99...	24.75	25.24	25.74	26.23	26.73	27.22	27.72	28.21
100...	25.00	25.50	26.00	26.50	27.00	27.50	28.00	28.50
101...	25.25	25.75	26.26	26.76	27.27	27.77	28.28	28.78
102...	25.50	26.01	26.52	27.03	27.54	28.05	28.56	29.07
103...	25.75	26.26	26.78	27.29	27.81	28.32	28.84	29.35
104...	26.00	26.52	27.04	27.56	28.08	28.60	29.12	29.64
105...	26.25	26.77	27.30	27.82	28.35	28.87	29.40	29.92
106...	26.50	27.03	27.56	28.09	28.62	29.15	29.68	30.21
107...	26.75	27.28	27.82	28.35	28.89	29.42	29.96	30.49
108...	27.00	27.54	28.08	28.62	29.16	29.70	30.24	30.78
109...	27.25	27.79	28.34	28.88	29.43	29.97	30.52	31.06
110...	27.50	28.05	28.60	29.15	29.70	30.25	30.80	31.35
111...	27.75	28.30	28.86	29.41	29.97	30.52	31.08	31.63
112...	28.00	28.56	29.12	29.68	30.24	30.80	31.36	31.92
113...	28.25	28.81	29.38	29.94	30.51	31.07	31.64	32.20
114...	28.50	29.07	29.64	30.21	30.78	31.35	31.92	32.49
115...	28.75	29.32	29.90	30.47	31.05	31.62	32.20	32.77
116...	29.00	29.58	30.16	30.74	31.32	31.90	32.48	33.06
117...	29.25	29.83	30.42	31.00	31.59	32.17	32.76	33.34
118...	29.50	30.09	30.68	31.27	31.86	32.45	33.04	33.63
119...	29.75	30.34	30.94	31.53	32.13	32.72	33.32	33.91
120...	30.00	30.60	31.20	31.80	32.40	33.00	33.60	34.20
121...	30.25	30.85	31.46	32.06	32.67	33.27	33.88	34.48
122...	30.50	31.11	31.72	32.23	32.94	33.55	34.16	34.77
123...	30.75	31.36	31.98	32.59	33.21	33.82	34.44	35.05
124...	31.00	31.62	32.24	32.86	33.48	34.10	34.72	35.34
125...	31.25	31.87	32.50	33.12	33.75	34.37	35.00	35.62
126...	31.50	32.13	32.76	33.39	34.02	34.65	35.28	35.91
127...	31.75	32.38	33.02	33.65	34.29	34.92	35.56	36.19
128...	32.00	32.64	33.28	33.92	34.56	35.20	35.84	36.48
129...	32.25	32.89	33.54	34.18	34.83	35.47	36.12	36.76
130...	32.50	33.15	33.80	34.45	35.10	35.75	36.40	37.05
131...	32.75	33.40	34.06	34.71	35.37	36.02	36.68	37.33

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
132...	33.00	33.66	34.32	34.98	35.64	36.30	36.96	37.62
133...	33.25	33.91	34.58	35.24	35.91	36.57	37.24	37.90
134...	33.50	34.17	34.84	35.51	36.18	36.85	37.52	38.19
135...	33.75	34.42	35.10	35.77	36.45	37.12	37.80	38.47
136...	34.00	34.68	35.36	36.04	36.72	37.40	38.08	38.76
137...	34.25	34.93	35.62	36.30	36.99	37.67	38.36	39.04
138...	34.50	35.19	35.88	36.57	37.26	37.95	38.64	39.33
139...	34.75	35.44	36.14	36.83	37.53	38.22	38.92	39.61
140 ..	35.00	35.70	36.40	37.10	37.80	38.50	39.20	39.90
141...	35.25	35.95	36.66	37.36	38.07	38.77	39.48	40.18
142...	35.50	36.21	36.92	37.63	38.34	39.05	39.76	40.47
143...	35.75	36.46	37.18	37.89	38.61	39.32	40.04	40.75
144...	36.00	36.72	37.44	38.16	38.88	39.60	40.32	41.04
145...	36.25	36.97	37.70	38.42	39.15	39.87	40.60	41.32
146...	36.50	37.23	37.96	38.69	39.42	40.15	40.88	41.61
147...	36.75	37.48	38.22	38.95	39.69	40.42	41.16	41.89
148...	37.00	37.74	38.48	39.22	39.96	40.70	41.44	42.18
149...	37.25	37.99	38.74	39.48	40.23	40.97	41.72	42.46
150 ..	37.50	38.25	39.00	39.75	40.50	41.25	42.00	42.75
151...	37.75	38.50	39.26	40.01	40.77	41.52	42.28	43.03
152...	38.00	38.76	39.52	40.28	41.04	41.80	42.56	43.32
153...	38.25	39.01	39.78	40.54	41.31	42.07	42.84	43.60
154...	38.50	39.27	40.04	40.81	41.58	42.35	43.12	43.89
155...	38.75	39.52	40.30	41.07	41.85	42.62	43.40	44.17
156...	39.00	39.78	40.56	41.34	42.12	42.90	43.68	44.46
157...	39.25	40.03	40.82	41.60	42.39	43.17	43.96	44.74
158...	39.50	40.29	41.08	41.87	42.66	43.45	44.24	45.03
159...	39.75	40.54	41.34	42.13	42.93	43.72	44.52	45.31
160...	40.00	40.80	41.60	42.40	43.20	44.00	44.80	45.60
161...	40.25	41.05	41.86	42.66	43.47	44.27	45.08	45.88
162 ..	40.50	41.31	42.12	42.93	43.74	44.55	45.36	46.17
163...	40.75	41.56	42.38	43.19	44.01	44.82	45.64	46.45
164...	41.00	41.82	42.64	43.46	44.28	45.10	45.92	46.74
165...	41.25	42.07	42.90	43.72	44.55	45.37	46.20	47.02
166...	41.50	42.33	43.16	43.99	44.82	45.65	46.48	47.31
167...	41.75	42.58	43.42	44.25	45.09	45.92	46.76	47.59
168...	42.00	42.84	43.68	44.52	45.36	46.20	47.04	47.88
169...	42.25	43.09	43.94	44.78	45.63	46.47	47.32	48.16
170...	42.50	43.35	44.20	45.05	45.90	46.75	47.60	48.45
171...	42.75	43.60	44.46	45.31	46.17	47.02	47.88	48.73
172...	43.00	43.86	44.72	45.58	46.44	47.30	48.16	49.02
173...	43.25	44.11	44.98	45.84	46.71	47.57	48.44	49.30
174...	43.50	44.37	45.24	46.11	46.98	47.85	48.72	49.59
175...	43.75	44.62	45.50	46.37	47.25	48.12	49.00	49.87
176...	44.00	44.88	45.76	46.64	47.52	48.40	49.28	50.16
177...	44.25	45.13	46.02	46.90	47.79	48.67	49.56	50.44

True per cent. of proof.	WINE-GALLONS.							
	25	25½	26	26½	27	27½	28	28½
178	44.50	45.39	46.28	47.17	48.06	48.95	49.84	50.73
179	44.75	45.64	46.54	47.43	48.33	49.22	50.12	51.01
180	45.00	45.90	46.80	47.70	48.60	49.50	50.40	51.30
181	45.25	46.15	47.06	47.96	48.87	49.77	50.68	51.58
182	45.50	46.41	47.32	48.23	49.14	50.05	50.96	51.87
183	45.75	46.66	47.58	48.49	49.41	50.32	51.24	52.15
184	46.00	46.92	47.84	48.76	49.68	50.60	51.52	52.44
185	46.25	47.17	48.10	49.02	49.95	50.87	51.80	52.72
186	46.50	47.43	48.36	49.29	50.22	51.15	52.08	53.01
187	46.75	47.68	48.62	49.55	50.49	51.42	52.36	53.29
188	47.00	47.94	48.88	49.82	50.76	51.70	52.64	53.58
189	47.25	48.19	49.14	50.08	51.03	51.97	52.92	53.86
190	47.50	48.45	49.40	50.35	51.30	52.25	53.20	54.15
191	47.75	48.70	49.66	50.61	51.57	52.52	53.48	54.43
192	48.00	48.96	49.92	50.88	51.84	52.80	53.76	54.72
193	48.25	49.21	50.18	51.14	52.11	53.07	54.04	55.00
194	48.50	49.47	50.44	51.41	52.38	53.35	54.32	55.29
195	48.75	49.72	50.70	51.67	52.65	53.62	54.60	55.57
196	49.00	49.98	50.96	51.94	52.92	53.90	54.88	55.86
197	49.25	50.23	51.22	52.20	53.19	54.17	55.16	56.14
198	49.50	50.49	51.48	52.47	53.46	54.45	55.44	56.43
199	49.75	50.74	51.74	52.73	53.73	54.72	55.72	56.71
200	50.00	51.00	52.00	53.00	54.00	55.00	56.00	57.00

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
40	11.60	11.80	12.00	12.20	12.40	12.60	12.80	13.00
41	11.89	12.09	12.30	12.50	12.71	12.91	13.12	13.32
42	12.18	12.39	12.60	12.81	13.02	13.23	13.44	13.65
43	12.47	12.68	12.90	13.11	13.33	13.54	13.76	13.97
44	12.76	12.98	13.20	13.42	13.64	13.86	14.08	14.30
45	13.05	13.27	13.50	13.72	13.95	14.17	14.40	14.62
46	13.34	13.57	13.80	14.03	14.26	14.49	14.72	14.95
47	13.63	13.86	14.10	14.33	14.57	14.80	15.04	15.27
48	13.92	14.16	14.40	14.64	14.88	15.12	15.36	15.60
49	14.21	14.45	14.70	14.94	15.19	15.43	15.68	15.92
50	14.50	14.75	15.00	15.25	15.50	15.75	16.00	16.25
51	14.79	15.04	15.30	15.55	15.81	16.06	16.32	16.57
52	15.08	15.34	15.60	15.86	16.12	16.38	16.64	16.90
53	15.37	15.63	15.90	16.16	16.43	16.69	16.96	17.22
54	15.66	15.93	16.20	16.47	16.74	17.01	17.28	17.55
55	15.95	16.22	16.50	16.77	17.05	17.32	17.60	17.87
56	16.24	16.52	16.80	17.08	17.36	17.64	17.92	18.20
57	16.53	16.81	17.10	17.38	17.67	17.95	18.24	18.52
58	16.82	17.11	17.40	17.69	17.98	18.27	18.56	18.85
59	17.11	17.40	17.70	17.99	18.29	18.58	18.88	19.17
60	17.40	17.70	18.00	18.30	18.60	18.90	19.20	19.50
61	17.69	17.99	18.30	18.60	18.91	19.21	19.52	19.82
62	17.98	18.29	18.60	18.91	19.22	19.53	19.84	20.15
63	18.27	18.58	18.90	19.21	19.53	19.84	20.16	20.47
64	18.56	18.88	19.20	19.52	19.84	20.16	20.48	20.80
65	18.85	19.17	19.50	19.82	20.15	20.47	20.80	21.12
66	19.14	19.47	19.80	20.13	20.46	20.79	21.12	21.45
67	19.43	19.76	20.10	20.43	20.77	21.10	21.44	21.77
68	19.72	20.06	20.40	20.74	21.08	21.42	21.76	22.10
69	20.01	20.35	20.70	21.05	21.39	21.73	22.08	22.42
70	20.30	20.65	21.00	21.35	21.70	22.05	22.40	22.75
71	20.59	20.94	21.30	21.66	22.01	22.36	22.72	23.07
72	20.88	21.24	21.60	21.96	22.32	22.68	23.04	23.40
73	21.17	21.53	21.90	22.27	22.63	22.99	23.36	23.72
74	21.46	21.83	22.20	22.57	22.94	23.31	23.68	24.05
75	21.75	22.12	22.50	22.88	23.25	23.62	24.00	24.37
76	22.04	22.42	22.80	23.18	23.56	23.94	24.32	24.70
77	22.33	22.70	23.10	23.49	23.87	24.25	24.64	25.02
78	22.62	23.01	23.40	23.79	24.18	24.57	24.96	25.35
79	22.91	23.30	23.70	24.10	24.49	24.88	25.28	25.67
80	23.20	23.60	24.00	24.40	24.80	25.20	25.60	26.00
81	23.49	23.89	24.30	24.70	25.11	25.51	25.92	26.32
82	23.78	24.19	14.60	25.01	25.42	25.83	26.24	26.65
83	24.07	24.48	24.90	25.31	25.73	26.14	26.56	26.97
84	24.36	24.78	25.20	25.62	26.04	26.46	26.88	27.30
85	24.65	25.07	25.50	25.92	26.35	26.77	27.20	27.62

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
86...	24.94	25.37	25.80	26.23	26.66	27.09	27.52	27.95
87...	25.23	25.66	26.10	26.53	26.97	27.40	27.84	28.27
88...	25.52	25.96	26.40	26.84	27.28	27.72	28.16	28.60
89...	25.81	26.25	26.70	27.14	27.59	28.03	28.48	28.92
90...	26.10	26.55	27.00	27.45	27.90	28.35	28.80	29.25
91...	26.39	26.84	27.30	27.75	28.21	28.66	29.12	29.57
92...	26.68	27.14	27.60	28.06	28.52	28.98	29.44	29.90
93...	26.97	27.43	27.90	28.36	28.83	29.29	29.76	30.22
94...	27.26	27.73	28.20	28.67	29.14	29.61	30.08	30.55
95...	27.55	28,02	28.50	28.97	29.45	29.92	30.40	30.87
96...	27.84	28.32	28.80	29.28	29.76	30.24	30.72	31.20
97...	28.13	28.61	29.10	29.58	30.07	30.55	31.04	31.52
98...	28.42	28.91	29.40	29.89	30.38	30.87	31.36	31.85
99...	28.71	29.20	29.70	30.19	30.69	31.18	31.68	32.17
100...	29.00	29.50	30.00	30.50	31.00	31.50	32.00	32.50
101...	29.29	29.79	30.30	30.80	31.31	31.81	32.32	32.82
102...	29.58	30.09	30.60	31.11	31.62	32.13	32.64	33.15
103...	29.87	30.38	30.90	31.41	31.93	32.44	32.96	33.47
104...	30.16	30.68	31.20	31.72	32.24	32.76	33.28	33.80
105...	30.45	30.97	31.50	32.02	32.55	33.07	33.60	34.12
106...	30.74	31.27	31.80	32.33	32.86	33.39	33.92	34.45
107...	31.03	31.56	32.10	32.63	33.17	33.70	34.24	34.77
108...	31.32	31.86	32.40	32.94	33.48	34.02	34.56	35.10
109...	31.61	32.15	32.70	33.24	33.79	34.33	34.88	35.42
110...	31.90	32.45	33.00	33.55	34.10	34.65	35.20	35.75
111...	32.19	32.74	33.30	33.85	34.41	34.96	35.52	36.07
112...	32.48	33.04	33.60	34.16	34.72	35.28	35.84	36.40
113...	32.77	33.33	33.90	34.46	35.03	35.59	36.16	36.72
114...	33.06	33.63	34.20	34.77	35.34	35.91	36.48	37.05
115...	33.35	33.92	34.50	35.07	35.65	36.22	36.80	37.37
116...	33.64	34.22	34.80	35.38	35.96	36.54	37.12	37.70
117...	33.93	34.51	35.10	35.68	36.27	36.85	37.44	38.02
118...	34.22	34.81	35.40	35.99	36.58	37.17	37.76	38.35
119...	34.51	35.10	35.70	36.29	36.89	37.48	38.08	38.67
120...	34.80	35.40	36.00	36.60	37.20	37.80	38.40	39.00
121...	35.09	35.69	36.30	36.90	37.51	38.11	38.72	39.32
122...	35.38	35.99	36.60	37.21	37.82	38.43	39.04	39.65
123...	35.67	36.28	36.90	37.51	38.13	38.74	39.36	39.97
124...	35.96	36.58	37.20	37.82	38.44	39.06	39.68	40.30
125...	36.25	36.87	37.50	38.12	38.75	39.37	40.00	40.62
126...	36.54	37.17	37.80	38.43	39.06	39.69	40.32	40.95
127...	36.83	37.46	38.10	38.73	39.37	40.00	40.64	41.27
128...	37.12	37.76	38.40	39.04	39.68	40.32	40.96	41.60
129...	37.41	38.05	38.70	39.34	39.99	40.63	41.28	41.92
130...	37.70	38.35	39.00	39.65	40.30	40.95	41.60	42.25
131...	37.99	38.64	39.30	39.95	40.61	41.26	41.92	42.57

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
132...	38.28	38.94	39.60	40.26	40.92	41.58	42.24	42.90
133...	38.57	39.23	39.90	40.56	41.23	41.89	42.56	43.22
134...	38.86	39.53	40.20	40.87	41.54	42.21	42.88	43.55
135...	39.15	39.82	40.50	41.17	41.85	42.52	43.20	43.87
136...	39.44	40.12	40.80	41.48	42.16	42.84	43.52	44.20
137...	39.73	40.41	41.10	41.78	42.47	43.15	43.84	44.52
138...	40.02	40.71	41.40	42.09	42.78	43.47	44.16	44.85
139...	40.31	41.00	41.70	42.39	43.09	43.78	44.48	45.17
140...	40.60	41.30	42.00	42.70	43.40	44.10	44.80	45.50
141...	40.89	41.59	42.30	43.00	43.71	44.41	45.12	45.82
142...	41.18	41.89	42.60	43.31	44.02	44.73	45.44	46.15
143...	41.47	42.18	42.90	43.61	44.33	45.04	45.76	46.47
144...	41.76	42.48	43.20	43.92	44.64	45.36	46.08	46.80
145...	42.05	42.77	43.50	44.22	44.95	45.67	46.40	47.12
146...	42.34	43.07	43.80	44.53	45.26	45.99	46.72	47.45
147...	42.63	43.36	44.10	44.83	45.57	46.30	47.04	47.77
148...	42.92	43.66	44.40	45.14	45.88	46.62	47.36	48.10
149...	43.21	43.95	44.70	45.44	46.19	46.93	47.68	48.42
150...	43.50	44.25	45.00	45.75	46.50	47.25	48.00	48.75
151...	43.79	44.54	45.30	46.05	46.81	47.56	48.32	49.07
152...	44.08	44.84	45.60	46.36	47.12	47.88	48.64	49.40
153...	44.37	45.13	45.90	46.66	47.43	48.19	48.96	49.72
154...	44.66	45.43	46.20	46.97	47.74	48.51	49.28	50.05
155...	44.95	45.72	46.50	47.27	48.05	48.82	49.60	50.37
156...	45.24	46.02	46.80	47.58	48.36	49.14	49.92	50.70
157...	45.53	46.31	47.10	47.88	48.67	49.45	50.24	51.02
158...	45.82	46.61	47.40	48.19	48.98	49.77	50.56	51.35
159...	46.11	46.90	47.70	48.49	49.29	50.08	50.88	51.67
160...	46.40	47.20	48.00	48.80	49.60	50.40	51.20	52.00
161...	46.69	47.49	48.30	49.10	49.91	50.71	51.52	52.32
162...	46.98	47.79	48.60	49.41	50.22	51.03	51.84	52.65
163...	47.27	48.08	48.90	49.71	50.53	51.34	52.16	52.97
164...	47.56	48.38	49.20	50.02	50.84	51.66	52.48	53.30
165...	47.85	48.67	49.50	50.32	51.15	51.97	52.80	53.62
166...	48.14	48.97	49.80	50.63	51.46	52.29	53.12	53.95
167...	48.43	49.26	50.10	50.93	51.77	52.60	53.44	54.27
168...	48.72	49.56	50.40	51.24	52.08	52.92	53.76	54.60
169...	49.01	49.85	50.70	51.54	52.39	53.23	54.08	54.92
170...	49.30	50.15	51.00	51.85	52.70	53.55	54.40	55.25
171...	49.59	50.44	51.30	52.15	53.01	53.86	54.72	55.57
172...	49.88	50.74	51.60	52.46	53.32	54.18	55.04	55.90
173...	50.17	51.03	51.90	52.76	53.63	54.49	55.36	56.22
174...	50.46	51.33	52.20	53.07	53.94	54.81	55.68	56.55
175...	50.75	51.62	52.50	53.37	54.25	55.12	56.00	56.87
176...	51.04	51.92	52.80	53.68	54.56	55.44	56.32	57.20
177...	51.33	52.21	53.10	53.98	54.87	55.75	56.64	57.52

True per cent. of proof.	WINE-GALLONS.							
	29	29½	30	30½	31	31½	32	32½
178...	51.62	52.51	53.40	54.29	55.18	56.07	56.96	57.85
179...	51.91	52.80	53.70	54.59	55.49	56.38	57.28	58.17
180...	52.20	53.10	54.00	54.90	55.80	56.70	57.60	58.50
181...	52.49	53.39	54.30	55.20	56.11	57.01	57.92	58.82
182...	52.78	53.69	54.60	55.51	56.42	57.33	58.24	59.15
183...	53.07	53.98	54.90	55.81	56.73	57.64	58.56	59.47
184...	53.36	54.28	55.20	56.12	57.04	57.96	58.88	59.80
185...	53.65	54.57	55.50	56.42	57.35	58.27	59.20	60.12
186...	53.94	54.87	55.80	56.73	57.66	58.59	59.52	60.45
187...	54.23	55.16	56.10	57.03	57.97	58.90	59.84	60.77
188...	54.52	55.46	56.40	57.34	58.28	59.22	60.16	61.10
189...	54.81	55.75	56.70	57.64	58.59	59.53	60.48	61.42
190...	55.10	56.05	57.00	57.95	58.90	59.85	60.80	61.75
191...	55.39	56.34	57.30	58.25	59.21	60.16	61.12	62.07
192...	55.68	56.64	57.60	58.56	59.52	60.48	61.44	62.40
193...	55.97	56.93	57.90	58.86	59.83	60.79	61.76	62.72
194...	56.26	57.23	58.20	59.17	60.14	61.11	62.08	63.05
195...	56.55	57.52	58.50	59.47	60.45	61.42	62.40	63.37
196...	56.84	57.82	58.80	59.78	60.76	61.74	62.72	63.70
197...	57.13	58.11	59.10	60.08	61.07	62.05	63.04	64.02
198...	57.42	58.41	59.40	60.39	61.38	62.37	63.36	64.35
199...	57.71	58.70	59.70	60.69	61.69	62.68	63.68	64.67
200...	58.00	59.00	60.00	61.00	62.00	63.00	64.00	65.00

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
40....	13.20	13.40	13.60	13.80	14.00	14.20	14.40	14.60
41....	13.53	13.73	13.94	14.14	14.35	14.55	14.76	14.96
42....	13.86	14.07	14 28	14.49	14.70	14.91	15.12	15.33
43....	14.19	14.40	14.62	14.83	15.05	15.26	15.48	15.69
44....	14.52	14.74	14.96	15.18	15.40	15.62	15.84	16.06
45....	14.85	15.07	15.30	15.52	15.75	15.97	16.20	16.42
46....	15.18	15.41	15.64	15.87	16.10	16.33	16.56	16.79
47....	15.51	15.74	15.98	16.21	16.45	16.68	16.92	17.15
48....	15.84	16.08	16.32	16.56	16.80	17.04	17.28	17.52
49....	16.17	16.41	16.66	16.90	17.15	17.39	17.64	17.88
50....	16.50	16.75	17.00	17.25	17.50	17.75	18.00	18.25
51....	16.83	17.08	17.34	17.59	17.85	18.10	18.36	18.61
52....	17.16	17.42	17.68	17.94	18.20	18.46	18.72	18.98
53....	17.49	17.75	18.02	18.28	18.55	18.81	19.08	19.34
54 ...	17.82	18.09	18.36	18.63	18.90	19.17	19.44	19.71
55....	18.15	18.42	18.70	18.97	19.25	19.52	19.80	20.07
56....	18.48	18.76	19.04	19.32	19.60	19.88	20.16	20.44
57....	18.81	19.09	19.38	19.66	19.95	20.23	20.52	20.80
58....	19.14	19.43	19.72	20.01	20.30	20.59	20.88	21.18
59....	19.47	19.76	20.06	20.35	20.65	20.94	21.24	21.53
60....	19.80	20.10	20.40	20.70	21.00	21.30	21.60	21.90
61....	20.13	20.43	20.74	21.04	21.35	21.65	21.96	22.27
62....	20.46	20.77	21.08	21.39	21.70	22.01	22.32	22.63
63....	20.79	21.10	21.42	21.73	22.05	22.36	22.68	23.00
64....	21.12	21.44	21.76	22.08	22.40	22.72	23.04	23.36
65....	21.45	21.77	22.10	22.42	22.75	23.07	23.40	23.73
66....	21.78	22.11	22.44	22.77	23.10	23.43	23.76	24.09
67....	22.11	22.44	22.78	23.11	23.45	23.78	24.12	24.46
68....	22.44	22.78	23.12	23.46	23.80	24.14	24.48	24.82
69....	22.77	23.11	23.46	23.80	24.15	24.49	24.84	25.19
70....	23.10	23.45	23.80	24.15	24.50	24.85	25.20	25.55
71....	23.43	23.78	24.14	24.49	24.85	25.20	25.56	25.92
72....	23.76	24.12	24.48	24.84	25.20	25.56	25.92	26.28
73....	24.09	24.45	24.82	25.18	25.55	25.91	26.28	26.65
74....	24.42	24.79	25.16	25.53	25.90	26.27	26.64	27.01
75....	24.75	25.12	25.50	25.87	26.25	26.62	27.00	27.38
76....	25.08	25.46	25.84	26.22	26.60	26.98	27.36	27.74
77....	25.41	25.79	26.18	26.56	26.95	27.33	27.72	28.11
78....	25.74	26.13	26.52	26.91	27.30	27.69	28.08	28.47
79....	26.07	26.46	26.86	27.25	27.65	28.04	28.44	28.84
80....	26.40	26.80	27.20	27.60	28.00	28.40	28.80	29.20
81....	26.73	27.13	27.54	27.94	28.35	28.75	29.16	29.56
82....	27.06	27.47	27.88	28.29	28.70	29.11	29.52	29.93
83....	27.39	27.80	28.22	28.63	29.05	29.46	29.88	30.29
84....	27.72	28.14	28.56	28.98	29.40	29.82	30.24	30.66
85....	28.05	28.47	28.90	29.32	29.75	30.17	30.60	31.02

True per cent. of proof.	WINE GALLONS							
	33	33½	34	34½	35	35½	36	36½
86...	28.38	28.81	29.24	29.67	30.10	30.53	30.96	31.39
87...	28.71	29.14	29.58	30.01	30.45	30.88	31.32	31.75
88...	29.04	29.48	29.92	30.36	30.80	31.24	31.68	32.12
89...	29.37	29.81	30.26	30.70	31.15	31.59	32.04	32.48
90...	29.70	30.15	30.60	31.05	31.50	31.95	32.40	32.85
91 ..	30.03	30.48	30.94	31.39	31.85	32.30	32.76	33.21
92...	30.36	30.82	31.28	31.74	32.20	32.66	33.12	33.58
93...	30.69	31.15	31.62	32.08	32.55	33.01	33.48	33.94
94...	31.02	31.49	31.96	32.43	32.90	33.37	33.84	34.31
95...	31.35	31.82	32.30	32.77	33.25	33.72	34.20	34.67
96...	31.68	32.16	32.64	33.12	33.60	34.08	34.56	35.04
97...	32.01	32.49	32.98	33.46	33.95	34.43	34.92	35.40
98...	32.34	32.83	33.32	33.81	34.30	34.79	35.28	35.77
99...	32.67	33.16	33.66	34.15	34.65	35.14	35.64	36.13
100...	33.00	33.50	34.00	34.50	35.00	35.50	36.00	36.50
101...	33.33	33.83	34.34	34.84	35.35	35.85	36.36	36.86
102...	33.66	34.17	34.68	35.19	35.70	36.21	36.72	37.23
103...	33.99	34.50	35.02	35.53	36.05	36.56	37.08	37.59
104...	34.32	34.84	35.36	35.88	36.40	36.92	37.44	37.96
105...	34.65	35.17	35.70	36.22	36.75	37.27	37.80	38.32
106...	34.98	35.51	36.04	36.57	37.10	37.63	38.16	38.69
107...	35.31	35.84	36.38	36.91	37.45	37.98	38.52	39.05
108...	35.64	36.18	36.72	37.26	37.80	38.34	38.88	39.42
109...	35.97	36.51	37.06	37.60	38.15	38.69	39.24	39.78
110...	36.30	36.85	37.40	37.95	38.50	39.05	39.60	40.15
111...	36.63	37.18	37.74	38.29	38.85	39.40	39.96	40.51
112...	36.96	37.52	38.08	38.64	39.20	39.76	40.32	40.88
113...	37.29	37.85	38.42	38.98	39.55	40.11	40.68	41.24
114...	37.62	38.19	38.76	39.33	39.90	40.47	41.04	41.61
115...	37.95	38.52	39.10	39.67	40.25	40.82	41.40	41.97
116...	38.28	38.86	39.44	40.02	40.60	41.18	41.76	42.34
117...	38.61	39.19	39.78	40.36	40.95	41.53	42.12	42.70
118...	38.94	39.53	40.12	40.71	41.30	41.89	42.48	43.07
119...	39.27	39.86	40.46	41.05	41.65	42.24	42.84	43.43
120...	39.60	40.20	40.80	41.40	42.00	42.60	43.20	43.80
121...	39.93	40.53	41.14	41.74	42.35	42.95	43.56	44.16
122...	40.26	40.87	41.48	42.09	42.70	43.31	43.92	44.53
123...	40.59	41.20	41.82	42.43	43.05	43.66	44.28	44.89
124...	40.92	41.54	42.16	42.78	43.40	44.02	44.64	45.26
125...	41.25	41.87	42.50	43.12	43.75	44.37	45.00	45.62
126...	41.58	42.21	42.84	43.47	44.10	44.73	45.36	45.99
127...	41.91	42.54	43.18	43.81	44.45	45.08	45.72	46.35
128...	42.24	42.88	43.52	44.16	44.80	45.44	46.08	46.72
129...	42.57	43.21	43.86	44.50	45.15	45.79	46.44	47.08
130...	42.90	43.55	44.20	44.85	45.50	46.15	46.80	47.45
131...	43.23	43.88	44.54	45.19	45.85	46.50	47.16	47.81

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
132...	43.56	44.22	44.88	45.54	46.20	46.86	47.52	48.18
133...	43.89	44.55	45.22	45.88	46.55	47.21	47.88	48.54
134...	44.22	44.89	45.56	46.23	46.90	47.57	48.24	48.91
135...	44.55	45.22	45.90	46.57	47.25	47.92	48.60	49.27
136...	44.88	45.56	46.24	46.92	47.60	48.28	48.96	49.64
137...	45.21	45.89	46.58	47.26	47.95	48.63	49.32	50.00
138...	45.54	46.23	46.92	47.61	48.30	48.99	49.68	50.37
139...	45.87	46.56	47.26	47.95	48.65	49.34	50.04	50.73
140...	46.20	46.90	47.60	48.30	49.00	49.70	50.40	51.10
141...	46.53	47.23	47.94	48.64	49.35	50.05	50.76	51.46
142...	46.86	47.57	48.28	48.99	49.70	50.41	51.12	51.83
143...	47.19	47.90	48.62	49.33	50.05	50.76	51.48	52.19
144...	47.52	48.24	48.96	49.68	50.40	51.12	51.84	52.56
145...	47.85	48.57	49.30	50.02	50.75	51.47	52.20	52.92
146...	48.18	48.91	49.64	50.37	51.10	51.83	52.56	53.29
147...	48.51	49.24	49.98	50.71	51.45	52.18	52.92	53.65
148...	48.84	49.58	50.32	51.06	51.80	52.54	53.28	54.02
149...	49.17	49.91	50.66	51.40	52.15	52.89	53.64	54.38
150...	49.50	50.25	51.00	51.75	52.50	53.25	54.00	54.75
151...	49.83	50.58	51.34	52.09	52.85	53.60	54.36	55.11
152...	50.16	50.92	51.68	52.44	53.20	53.96	54.72	55.48
153...	50.49	51.25	52.02	52.78	53.55	54.32	55.08	55.84
154...	50.82	51.59	52.36	53.13	53.90	54.67	55.44	56.21
155...	51.15	51.92	52.70	53.47	54.25	55.03	55.80	56.57
156...	51.48	52.26	53.04	53.82	54.60	55.38	56.16	56.94
157...	51.81	52.59	53.38	54.16	54.95	55.74	56.52	57.30
158...	52.14	52.93	53.72	54.51	55.30	56.09	56.88	57.67
159...	52.47	53.26	54.06	54.85	55.65	56.45	57.24	58.03
160...	52.80	53.60	54.40	55.20	56.00	56.80	57.60	58.40
161...	53.13	53.93	54.74	55.54	56.35	57.15	57.96	58.76
162...	53.46	54.27	55.08	55.89	56.70	57.51	58.32	59.13
163...	53.79	54.60	55.42	56.23	57.05	57.86	58.68	59.49
164...	54.12	54.94	55.76	56.58	57.40	58.22	59.04	59.86
165...	54.45	55.27	56.10	56.92	57.75	58.57	59.40	60.22
166...	54.78	55.61	56.44	57.27	58.10	58.93	59.76	60.59
167...	55.11	55.94	56.78	57.61	58.45	59.28	60.12	60.95
168...	55.44	56.28	57.12	57.96	58.80	59.64	60.48	61.32
169...	55.77	56.61	57.46	58.30	59.15	59.99	60.84	61.68
170...	56.10	56.95	57.80	58.65	59.50	60.35	61.20	62.05
171...	56.43	57.28	58.14	58.99	59.85	60.70	61.56	62.41
172...	56.76	57.62	58.48	59.34	60.20	61.06	61.92	62.78
173...	57.09	57.95	58.82	59.68	60.55	61.41	62.28	63.14
174...	57.42	58.29	59.16	60.03	60.90	61.77	62.64	63.51
175...	57.75	58.62	59.50	60.37	61.25	62.12	63.00	63.87
176...	58.08	58.96	59.84	60.72	61.60	62.48	63.36	64.24
177...	58.41	59.29	60.18	61.06	61.95	62.83	63.72	64.60

True per cent. of proof.	WINE-GALLONS.							
	33	33½	34	34½	35	35½	36	36½
178...	58.74	59.63	60.52	61.41	62.30	63.19	64.08	64.97
179...	59.07	59.96	60.86	61.75	62.65	63.54	64.44	65.33
180...	59.40	60.30	61.20	62.10	63.00	63.90	64.80	65.70
181...	59.73	60.63	61.54	62.44	63.35	64.25	65.16	66.06
182...	60.06	60.97	61.88	62.79	63.70	64.61	65.52	66.43
183...	60.39	61.30	62.22	63.13	64.05	64.96	65.88	66.79
184...	60.72	61.64	62.56	63.48	64.40	65.32	66.24	67.16
185...	61.05	61.97	62.90	63.82	64.75	65.67	66.60	67.52
186...	61.38	62.31	63.24	64.17	65.10	66.03	66.96	67.89
187...	61.71	62.64	63.58	64.51	65.45	66.38	67.32	68.25
188...	62.04	62.98	63.92	64.86	65.80	66.74	67.68	68.62
189...	62.37	63.31	64.26	65.20	66.15	67.09	68.04	68.98
190...	62.70	63.65	64.60	65.55	66.50	67.45	68.40	69.35
191...	63.03	63.98	64.94	65.89	66.85	67.80	68.76	69.71
192...	63.36	64.32	65.28	66.24	67.20	68.16	69.12	70.08
193...	63.69	64.65	65.62	66.58	67.55	68.51	69.48	70.44
194...	64.02	64.99	65.96	66.93	67.90	68.87	69.84	70.81
195...	64.35	65.32	66.30	67.27	68.25	69.22	70.20	71.17
196...	64.68	65.66	66.64	67.62	68.60	69.58	70.56	71.54
197...	65.01	65.99	66.98	67.96	68.95	69.93	70.92	71.90
198...	65.34	66.33	67.32	68.31	69.30	70.29	71.28	72.27
199...	65.67	66.66	67.66	68.65	69.65	70.64	71.64	72.63
200...	66.00	67.00	68.00	69.00	70.00	71.00	72.00	73.00

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
40....	14.80	15.00	15.20	15.40	15.60	15.80	16.00	16.20
41....	15.17	15.37	15.58	15.78	15.99	16.19	16.40	16.60
42....	15.54	15.75	15.96	16.17	16.38	16.59	16.80	17.01
43....	15.91	16.12	16.34	16.55	16.77	16.98	17.20	17.41
44....	16 28	16.50	16.72	16.94	17.16	17.38	17.60	17.82
45....	16.65	16.87	17.10	17.32	17.55	17.77	18.00	18.22
46....	17.02	17.25	17.48	17.71	17.94	18.17	18.40	18.63
47....	17.39	17.62	17.86	18.09	18.33	18.56	18.80	19.03
48....	17.76	18.00	18.24	18.48	18.72	18.96	19.20	19.44
49....	18.13	18.37	18.62	18.86	19.11	19.35	19.60	19.84
50....	18.50	18.75	19.00	19.25	19.50	19.75	20.00	20.25
51....	18.87	19.12	19.38	19.63	19.89	20.14	20.40	20.65
52....	19.24	19.50	19.76	20.02	20.28	20.54	20.80	21.06
53....	19.61	19.87	20.14	20.40	20.67	20.93	21.20	21.46
54....	19.98	20.25	20.52	20.79	21.06	21.33	21.60	21.87
55....	20.35	20.62	20.90	21.17	21.45	21.72	22.00	22.27
56....	20.72	21.00	21.28	21.56	21.84	22.12	22.40	22.68
57....	21.09	21.37	21.66	21.94	22.23	22.51	22.80	23.08
58....	21.46	21.75	22.04	22.33	22.62	22.91	23.20	23.49
59....	21.83	22.12	22.42	22.71	23.01	23.30	23.60	23.89
60....	22.20	22.50	22.80	23.10	23.40	23.70	24.00	24.30
61....	22.57	22.87	23.18	23.48	23.79	24.09	24.40	24.70
62....	22.94	23.25	23.56	23.87	24.18	24.49	24.80	25.11
63....	23.31	23.62	23.94	24.25	24.57	24.88	25.20	25.51
64....	23.68	24.00	24.32	24.64	24.96	25.28	25.60	25.92
65....	24.05	24.37	24.70	25.02	25.35	25.67	26.00	26.32
66....	24.42	24.75	25.08	25.41	25.74	26.07	26.40	26.73
67....	24.79	25.12	25.46	25.79	26.13	26.46	26.80	27.13
68....	25.16	25.50	25.84	26.18	26.52	26.86	27.20	27.54
69....	25.53	25.87	26.22	26.56	26.91	27.25	27.60	27.94
70....	25.90	26.25	26.60	26.95	27.30	27.65	28.00	28.35
71....	26.27	26.62	26.98	27.33	27.69	28.04	28.40	28.75
72....	26.64	27.00	27.36	27.72	28.08	28.44	28.80	29.16
73....	27.01	27.37	27.74	28.10	28.47	28.83	29.20	29.56
74....	27.38	27.75	28.12	28.49	28.86	29.23	29.60	29.97
75....	27.75	28.12	28.50	28.87	29.25	29.62	30.00	30.37
76....	28.12	28.50	28.88	29.26	29.64	30.02	30.40	30.78
77....	28.49	28.87	29.26	29.64	30.03	30.41	30.80	31.18
78....	28.86	29.25	29.64	30.03	30.42	30.81	31.20	31.59
79....	29.23	29.62	30.02	30.41	30.81	31.20	31.60	31.99
80....	29.60	30.00	30.40	30.80	31.20	31.60	32.00	32.40
81....	29.97	30.37	30.78	31.18	31.59	31.99	32.40	32.80
82....	30.34	30.75	31.16	31.57	31.98	32.39	32.80	33.21
83....	30.71	31.12	31.54	31.95	32.37	32.78	33.20	33.61
84....	31.08	31.50	31.92	32.34	32.76	33.18	33.60	34.02
85....	31.45	31.87	32.30	32.72	33.15	33.57	34.00	34.42

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
86...	31.82	32.25	32.68	33.11	33.54	33.97	34.40	34.83
87...	32.19	32.62	33.06	33.49	33.93	34.36	34.80	35.23
88...	32.56	33.00	33.44	33.88	34.32	34.76	35.20	35.64
89...	32.93	33.37	33.82	34.26	34.71	35.15	35.60	36.04
90...	33.30	33.75	34.20	34.65	35.10	35.55	36.00	36.45
91...	33.67	34.12	34.58	35.03	35.49	35.94	36.40	36.85
92...	34.04	34.50	34.96	35.42	35.88	36.34	36.80	37.26
93...	34.41	34.87	35.34	35.80	36.27	36.73	37.20	37.66
94...	34.78	35.25	35.72	36.19	36.66	37.13	37.60	38.07
95...	35.15	35.62	36.10	36.57	37.05	37.52	38.00	38.47
96...	35.52	36.00	36.48	36.96	37.44	37.92	38.40	38.88
97...	35.89	36.37	36.86	37.34	37.83	38.31	38.80	39.28
98...	36.26	36.75	37.24	37.73	38.22	38.71	39.20	39.69
99...	36.63	37.12	37.62	38.11	38.61	39.10	39.60	40.09
100...	37.00	37.50	38.00	38.50	39.00	39.50	40.00	40.50
101...	37.37	37.87	38.38	38.88	39.39	39.89	40.40	40.90
102...	37.74	38.25	38.76	39.27	39.78	40.29	40.80	41.31
103...	38.11	38.62	39.14	39.65	40.17	40.68	41.20	41.71
104...	38.48	39.00	39.52	40.04	40.56	41.08	41.60	42.12
105...	38.85	39.37	39.90	40.42	40.95	41.47	42.00	42.52
106...	39.22	39.75	40.28	40.81	41.34	41.87	42.40	42.93
107...	39.59	40.12	40.66	41.19	41.73	42.26	42.80	43.33
108...	39.96	40.50	41.04	41.58	42.12	42.66	43.20	43.74
109...	40.33	40.87	41.42	41.96	42.51	43.05	43.60	44.14
110...	40.70	41.25	41.80	42.35	42.90	43.45	44.00	44.55
111...	41.07	41.62	42.18	42.73	43.29	43.84	44.40	44.95
112...	41.44	42.00	42.56	43.12	43.68	44.24	44.80	45.36
113...	41.81	42.37	42.94	43.50	44.07	44.63	45.20	45.76
114...	42.18	42.75	43.32	43.89	44.46	45.03	45.60	46.17
115...	42.55	43.12	43.70	44.27	44.85	45.42	46.00	46.57
116...	42.92	43.50	44.08	44.66	45.24	45.82	46.40	46.98
117...	43.29	43.87	44.46	45.04	45.63	46.21	46.80	47.38
118...	43.66	44.25	44.84	45.43	46.02	46.61	47.20	47.79
119...	44.03	44.62	45.22	45.81	46.41	47.00	47.60	48.19
120...	44.40	45.00	45.60	46.20	46.80	47.40	48.00	48.60
121...	44.77	45.37	45.98	46.58	47.19	47.79	48.40	49.00
122...	45.14	45.75	46.36	46.97	47.58	48.19	48.80	49.41
123...	45.51	46.12	46.74	47.35	47.97	48.58	49.20	49.81
124...	45.88	46.50	47.12	47.74	48.36	48.98	49.60	50.22
125...	46.25	46.87	47.50	48.12	48.75	49.37	50.00	50.62
126...	46.62	47.25	47.88	48.51	49.14	49.77	50.40	51.03
127...	46.99	47.62	48.26	48.89	49.53	50.16	50.80	51.43
128...	47.36	48.00	48.64	49.28	49.92	50.56	51.20	51.84
129...	47.73	48.37	49.02	49.66	50.31	50.95	51.60	52.24
130...	48.10	48.75	49.40	50.05	50.70	51.35	52.00	52.65
131...	48.47	49.12	49.78	50.43	51.09	51.74	52.40	53.05

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
132...	48.84	49.50	50.16	50.82	51.48	52.14	52.80	53.46
133...	49.21	49.87	50.54	51.20	51.87	52.53	53.20	53.86
134...	49.58	50.25	50.92	51.59	52.26	52.93	53.60	54.27
135...	49.95	50.62	51.30	51.97	52.65	53.32	54.00	54.67
136...	50.32	51.00	51.68	52.36	53.04	53.72	54.40	55.08
137...	50.69	51.37	52.06	52.74	53.43	54.11	54.80	55.48
138...	51.06	51.75	52.44	53.13	53.82	54.51	55.20	55.89
139...	51.43	52.12	52.82	53.51	54.21	54.90	55.60	56.29
140...	51.80	52.50	53.20	53.90	54.60	55.30	56.00	56.70
141...	52.17	52.87	53.58	54.28	54.99	55.69	56.40	57.10
142...	52.54	53.25	53.96	54.67	55.38	56.09	56.80	57.51
143...	52.91	53.62	54.34	55.05	55.77	56.48	57.20	57.91
144...	53.28	54.00	54.72	55.44	56.16	56.88	57.60	58.32
145...	53.65	54.37	55.10	55.82	56.55	57.27	58.00	58.72
146...	54.02	54.75	55.48	56.21	56.94	57.67	58.40	59.13
147...	54.39	55.12	55.86	56.59	57.33	58.06	58.80	59.53
148...	54.76	55.50	56.24	56.98	57.72	58.46	59.20	59.94
149...	55.13	55.87	56.62	57.36	58.11	58.85	59.60	60.34
150...	55.50	56.25	57.00	57.75	58.50	59.25	60.00	60.75
151...	55.87	56.62	57.38	58.13	58.89	59.64	60.40	61.15
152...	56.24	57.00	57.76	58.52	59.28	60.04	60.80	61.56
153...	56.61	57.37	58.14	58.90	59.67	60.43	61.20	61.96
154 ..	56.98	57.75	58.52	59.29	60.06	60.83	61.60	62.37
155...	57.35	58.12	58.90	59.67	60.45	61.22	62.00	62.77
156...	57.72	58.50	59.28	60.06	60.84	61.62	62.40	63.18
157...	58.09	58.87	59.66	60.44	61.23	62.01	62.80	63.58
158...	58.46	59.25	60.04	60.83	61.62	62.41	63.20	63.99
159...	58.83	59.62	60.42	61.21	62.01	62.80	63.60	64.39
160...	59.20	60.00	60.80	61.60	62.40	63.20	64.00	64.80
161...	59.57	60.37	61.18	61.98	62.79	63.59	64.40	65.20
162...	59.94	60.75	61.56	62.37	63.18	63.99	64.80	65.61
163...	60.31	61.12	61.94	62.75	63.57	64.38	65.20	66.01
164...	60.68	61.50	62.32	63.14	63.96	64.78	65.60	66.42
165...	61.05	61.87	62.70	63.52	64.35	65.17	66.00	66.82
166...	61.42	62.25	63.08	63.91	64.74	65.57	66.40	67.23
167...	61.79	62.62	63.46	64.29	65.13	65.96	66.80	67.63
168...	62.16	63.00	63.84	64.68	65.52	66.36	67.20	68.04
169...	62.53	63.37	64.22	65.06	65.91	66.75	67.60	68.44
170...	62.90	63.75	64.60	65.45	66.30	67.15	68.00	68.85
171...	63.27	64.12	64.98	65.83	66.69	67.54	68.40	69.25
172...	63.64	64.50	65.36	66.22	67.08	67.94	68.80	69.66
173...	64.01	64.87	65.74	66.60	67.47	68.33	69.20	70.06
174...	64.38	65.25	66.12	66.99	67.86	68.73	69.60	70.47
175...	64.75	65.62	66.50	67.37	68.25	69.12	70.00	70.87
176...	65.12	66.00	66.88	67.76	68.64	69.52	70.40	71.28
177...	65.49	66.37	67.26	68.14	69.03	69.91	70.80	71.68

True per cent. of proof.	WINE-GALLONS.							
	37	37½	38	38½	39	39½	40	40½
178...	65.86	66.75	67.64	68.53	69.42	70.31	71.20	72.09
179...	66.23	67.12	68.02	68.91	69.81	70.70	71.60	72.49
180...	66.60	67.50	68.40	69.30	70.20	71.10	72.00	72.90
181...	66.97	67.87	68.78	69.68	70.59	71.49	72.40	73.30
182...	67.34	68.25	69.16	70.07	70.98	71.89	72.80	73.71
183...	67.71	68.62	69.54	70.45	71.37	72.28	73.20	74 11
184...	68.08	69.00	69.92	70.84	71.76	72.68	73.60	74.52
185...	68.45	69.37	70.30	71.22	72.15	73.07	74.00	74.92
186...	68.82	69.75	70.68	71.61	72.54	73.47	74.40	75.33
187...	69.19	70.12	71.06	71.99	72.93	73.86	74.80	75.73
188...	69.56	70.50	71.44	72.38	73.32	74.26	75.20	76.14
189...	69.93	70.87	71.82	72.76	73.71	74.65	75.60	76.54
190...	70.30	71.25	72.20	73.15	74.10	75.05	76.00	76.95
191...	70.67	71.62	72.58	73.53	74.49	75.44	76.40	77.35
192...	71.04	72.00	72.96	73.92	74.88	75.84	76.80	77.76
193...	71.41	72.37	73.34	74.30	75.27	76.23	77.20	78.16
194...	71.78	72.75	73.72	74.69	75.66	76.63	77.60	78.57
195...	72.15	73.12	74.10	75.07	76.05	77.02	78.00	78.97
196...	72.52	73.50	74.48	75.46	76.44	77.42	78.40	79.38
197...	72.89	73.87	74.86	75.84	76.83	77.81	78.80	79.78
198...	73.26	74.25	75.24	76.23	77.22	78.21	79.20	80.19
199...	73.63	74.62	75.62	76.61	77.61	78.60	79.60	80.59
200...	74.00	75.00	76.00	77.00	78.00	79.00	80.00	81.00

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
40....	16.40	16.60	16.80	17.00	17.20	17.40	17.60	17.80
41....	16.81	17.01	17.22	17.42	17.63	17.83	18.04	18.24
42....	17.22	17.43	17.64	17.85	18.06	18.27	18.48	18.69
43....	17.63	17.84	18.06	18.27	18.49	18.70	18.92	19.13
44....	18.04	18.26	18.48	18.70	18.92	19.14	19.36	19.58
45....	18.45	18.67	18.90	19.12	19.35	19.57	19.80	20.02
46....	18.86	19.09	19.32	19.55	19.78	20.01	20.24	20.47
47....	19.27	19.50	19.74	19.97	20.21	20.44	20.68	20.91
48....	19.68	19.92	20.16	20.40	20.64	20.88	21.12	21.36
49....	20.09	20.33	20.58	20.82	21.07	21.31	21.56	21.80
50....	20.50	20.75	21.00	21.25	21.50	21.75	22.00	22.25
51....	20.91	21.16	21.42	21.67	21.93	22.18	22.44	22.69
52....	21.32	21.58	21.84	22.10	22.36	22.62	22.88	23.14
53....	21.73	21.99	22.26	22.52	22.79	23.05	23.32	23.58
54....	22.14	22.41	22.68	22.95	23.22	23.49	23.76	24.03
55....	22.55	22.82	23.10	23.37	23.65	23.92	24.20	24.47
56....	22.96	23.24	23.52	23.80	24.08	24.36	24.64	24.92
57....	23.37	23.65	23.94	24.22	24.51	24.79	25.08	25.36
58....	23.78	24.07	24.36	24.65	24.94	25.23	25.52	25.81
59....	24.19	24.48	24.78	25.07	25.37	25.66	25.96	26.25
60....	24.60	24.90	25.20	25.50	25.80	26.10	26.40	26.70
61....	25.01	25.31	25.62	25.92	26.23	26.53	26.84	27.14
62....	25.42	25.73	26.04	26.35	26.66	26.97	27.28	27.59
63....	25.83	26.14	26.46	26.77	27.09	27.40	27.72	28.03
64....	26.24	26.56	26.88	27.20	27.52	27.84	28.16	28.48
65....	26.65	26.97	27.30	27.62	27.95	28.27	28.60	28.92
66....	27.06	27.39	27.72	28.05	28.38	28.71	29.04	29.37
67....	27.47	27.80	28.14	28.47	28.81	29.14	29.48	29.81
68....	27.88	28.22	28.56	28.90	29.24	29.58	29.92	30.26
69....	28.29	28.63	28.98	29.32	29.67	30.01	30.36	30.70
70....	28.70	29.05	29.40	29.75	30.10	30.45	30.80	31.15
71....	29.11	29.46	29.82	30.17	30.53	30.88	31.24	31.59
72....	29.52	29.88	30.24	30.60	30.96	31.32	31.68	32.04
73....	29.93	30.29	30.66	31.02	31.39	31.75	32.12	32.48
74....	30.34	30.71	31.08	31.45	31.82	32.19	32.56	32.93
75....	30.75	31.12	31.50	31.87	32.25	32.62	33.00	33.37
76....	31.16	31.54	31.92	32.30	32.68	33.06	33.44	33.82
77....	31.57	31.95	32.34	32.72	33.11	33.49	33.88	34.26
78....	31.98	32.37	32.76	33.15	33.54	33.93	34.32	34.71
79....	32.39	32.78	33.18	33.57	33.97	34.36	34.76	35.15
80....	32.80	33.20	33.60	34.00	34.40	34.80	35.20	35.60
81....	33.21	33.61	34.02	34.42	34.83	35.23	35.64	36.04
82....	33.62	34.03	34.44	34.85	35.26	35.67	36.08	36.49
83....	34.03	34.44	34.86	35.27	35.69	36.10	36.52	36.93
84....	34.44	34.86	35.28	35.70	36.12	36.54	36.96	37.38
85....	34.85	35.27	35.70	36.12	36.55	36.97	37.40	37.82

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
86...	35.26	35.69	36.12	36.55	36.98	37.41	37.84	38.27
87...	35.67	36.10	36.54	36.97	37.41	37.84	38.28	38.71
88...	36.08	36.52	36.96	37.40	37.84	38.28	38.72	39.16
89...	36.49	36.93	37.38	37.82	38.27	38.71	39.16	39.60
90...	36.90	37.35	37.80	38.25	38.70	39.15	39.60	40.05
91...	37.31	37.76	38.22	38.67	39.13	39.58	40.04	40.49
92...	37.72	38.18	38.64	39.10	39.56	40.02	40.48	40.94
93...	38.13	38.59	39.06	39.52	39.99	40.45	40.92	41.38
94...	38.54	39.01	39.48	39.95	40.42	40.89	41.36	41.83
95...	38.95	39.42	39.90	40.37	40.85	41.32	41.80	42.27
96...	39.36	39.84	40.32	40.80	41.28	41.76	42.24	42.72
97...	39.77	40.25	40.74	41.22	41.71	42.19	42.68	43.16
98...	40.18	40.67	41.16	41.65	42.14	42.63	43.12	43.61
99...	40.59	41.08	41.58	42.07	42.57	43.06	43.56	44.05
100...	41.00	41.50	42.00	42.50	43.00	43.50	44.00	44.50
101...	41.41	41.91	42.42	42.92	43.43	43.93	44.44	44.94
102...	41.82	42.33	42.84	43.35	43.86	44.37	44.88	45.39
103...	42.23	42.74	43.26	43.77	44.29	44.80	45.32	45.83
104...	42.64	43.16	43.68	44.20	44.72	45.24	45.76	46.28
105...	43.05	43.57	44.10	44.62	45.15	45.67	46.20	46.72
106...	43.46	43.99	44.52	45.05	45.58	46.11	46.64	47.17
107...	43.87	44.40	44.94	45.47	46.01	46.54	47.08	47.61
108...	44.28	44.82	45.36	45.90	46.44	46.98	47.52	48.06
109...	44.69	45.23	45.78	46.32	46.87	47.41	47.96	48.50
110...	45.10	45.65	46.20	46.75	47.30	47.85	48.40	48.95
111...	45.51	46.06	46.62	47.17	47.73	48.28	48.84	49.39
112...	45.92	46.48	47.04	47.60	48.16	48.72	49.28	49.84
113...	46.33	46.89	47.46	48.02	48.59	49.15	49.72	50.28
114...	46.74	47.31	47.88	48.45	49.02	49.59	50.16	50.73
115...	47.15	47.72	48.30	48.87	49.45	50.02	50.60	51.17
116...	47.56	48.14	48.72	49.30	49.88	50.46	51.04	51.62
117...	47.97	48.55	49.14	49.72	50.31	50.89	51.48	52.06
118...	48.38	48.97	49.56	50.15	50.74	51.33	51.92	52.51
119...	48.79	49.38	49.98	50.57	51.17	51.76	52.36	52.95
120...	49.20	49.80	50.40	51.00	51.60	52.20	52.80	53.40
121...	49.61	50.21	50.82	51.42	52.03	52.63	53.24	53.84
122...	50.02	50.63	51.24	51.85	52.46	53.07	53.68	54.29
123...	50.43	51.04	51.66	52.27	52.89	53.50	54.12	54.73
124...	50.84	51.46	52.08	52.70	53.32	53.94	54.56	55.18
125...	51.25	51.87	52.50	53.12	53.75	54.37	55.00	55.62
126...	51.66	52.29	52.92	53.55	54.18	54.81	55.44	56.07
127...	52.07	52.70	53.34	53.97	54.61	55.24	55.88	56.51
128...	52.48	53.12	53.76	54.40	55.04	55.68	56.32	56.96
129...	52.89	53.53	54.18	54.82	55.47	56.11	56.76	57.40
130...	53.30	53.95	54.60	55.25	55.90	56.55	57.20	57.85
131...	53.71	54.36	55.02	55.67	56.33	56.98	57.64	58.29

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
132...	54.12	54.78	55.44	56.10	56.76	57.42	58.08	58.74
133...	54.53	55.19	55.86	56.52	57.19	57.85	58.52	59.18
134...	54.94	55.61	56.28	56.95	57.62	58.29	58.96	59.63
135...	55.35	56.02	56.70	57.37	58.05	58.72	59.40	60.07
136...	55.76	56.44	57.12	57.80	58.48	59.16	59.84	60.52
137...	56.17	56.85	57.54	58.22	58.91	59.59	60.28	60.96
138...	56.58	57.27	57.96	58.65	59.34	60.03	60.72	61.41
139...	56.99	57.68	58.38	59.07	59.77	60.46	61.16	61.85
140...	57.40	58.10	58.80	59.50	60.20	60.90	61.60	62.30
141...	57.81	58.51	59.22	59.92	60.63	61.33	62.04	62.74
142...	58.22	58.93	59.64	60.35	61.06	61.77	62.48	63.19
143...	58.63	59.34	60.06	60.77	61.49	62.20	62.92	63.63
144...	59.04	59.76	60.48	61.20	61.92	62.64	63.36	64.08
145...	59.45	60.17	60.90	61.62	62.35	63.07	63.80	64.52
146...	59.86	60.59	61.32	62.05	62.78	63.51	64.24	64.97
147...	60.27	61.00	61.74	62.47	63.21	63.94	64.68	65.41
148...	60.68	61.42	62.16	62.90	63.64	64.38	65.12	65.86
149...	61.09	61.83	62.58	63.32	64.07	64.81	65.56	66.30
150...	61.50	62.25	63.00	63.75	64.50	65.25	66.00	66.75
151...	61.91	62.66	63.42	64.17	64.93	65.68	66.44	67.19
152...	62.32	63.08	63.84	64.60	65.36	66.12	66.88	67.64
153...	62.73	63.49	64.26	65.02	65.79	66.55	67.32	68.08
154...	63.14	63.91	64.68	65.45	66.22	66.99	67.76	68.53
155...	63.55	64.32	65.10	65.87	66.65	67.42	68.20	68.97
156...	63.96	64.74	65.52	66.30	67.08	67.86	68.64	69.42
157...	64.37	65.15	65.94	66.72	67.51	68.29	69.08	69.86
158...	64.78	65.57	66.36	67.15	67.94	68.73	69.52	70.31
159...	65.19	65.98	66.78	67.57	68.37	69.16	69.96	70.75
160...	65.60	66.40	67.20	68.00	68.80	69.60	70.40	71.20
161...	66.01	66.81	67.62	68.42	69.23	70.03	70.84	71.64
162...	66.42	67.23	68.04	68.85	69.66	70.47	71.28	72.09
163...	66.83	67.64	68.46	69.27	70.09	70.90	71.72	72.53
164...	67.24	68.06	68.88	69.70	70.52	71.34	72.16	72.98
165...	67.65	68.47	69.30	70.12	70.95	71.77	72.60	73.42
166...	68.06	68.89	69.72	70.55	71.38	72.21	73.04	73.87
167...	68.47	69.30	70.14	70.97	71.81	72.64	73.48	74.31
168...	68.88	69.72	70.56	71.40	72.24	73.08	73.92	74.76
169...	69.29	70.13	70.98	71.82	72.67	73.51	74.36	75.20
170...	69.70	70.55	71.40	72.25	73.10	73.95	74.80	75.65
171...	70.11	70.96	71.82	72.67	73.53	74.38	75.24	76.09
172...	70.52	71.38	72.24	73.10	73.96	74.82	75.68	76.54
173...	70.93	71.79	72.66	73.52	74.39	75.25	76.12	76.98
174...	71.34	72.21	73.08	73.95	74.82	75.69	76.56	77.43
175...	71.75	72.62	73.50	74.37	75.25	76.12	77.00	77.87
176...	72.16	73.04	73.92	74.80	75.68	76.56	77.44	78.32
177...	72.57	73.45	74.34	75.22	76.11	76.99	77.88	78.76

True per cent. of proof.	WINE-GALLONS.							
	41	41½	42	42½	43	43½	44	44½
178...	72.98	73.87	74.76	75.65	76.54	77.43	78.32	79.21
179...	73.39	74.28	75.18	76.07	76.97	77.86	78.76	79.65
180...	73.80	74.70	75.60	76.50	77.40	78.30	79.20	80.10
181...	74.21	75.11	76.02	76.92	77.83	78.73	79.64	80.54
182...	74.62	75.53	76.44	77.35	78.26	79.17	80.08	80.99
183...	75.03	75.94	76.86	77.77	78.69	79.60	80.52	81.43
184...	75.44	76.36	77.28	78.20	79.12	80.04	80.96	81.88
185...	75.85	76.77	77.70	78.62	79.55	80.47	81.40	82.32
186...	76.26	77.19	78.12	79.05	79.98	80.91	81.84	82.77
187...	76.67	77.60	78.54	79.47	80.41	81.34	82.28	83.21
188...	77.08	78.02	78.96	79.90	80.84	81.78	82.72	83.66
189...	77.49	78.43	79.38	80.32	81.27	82.21	83.16	84.10
190...	77.90	78.85	79.80	80.75	81.70	82.65	83.60	84.55
191...	78.31	79.26	80.22	81.17	82.13	83.08	84.04	84.99
192...	78.72	79.68	80.64	81.60	82.56	83.52	84.48	85.44
193...	79.13	80.09	81.06	82.02	82.99	83.95	84.92	85.88
194...	79.54	80.51	81.48	82.45	83.42	84.39	85.36	86.33
195...	79.95	80.92	81.90	82.87	83.85	84.82	85.80	86.77
196...	80.36	81.34	82.32	83.30	84.28	85.26	86.24	87.22
197...	80.77	81.75	82.74	83.72	84.71	85.69	86.68	87.66
198...	81.18	82.17	83.16	84.15	85.14	86.13	87.12	88.11
199...	81.59	82.58	83.58	84.57	85.57	86.56	87.56	88.55
200...	82.00	83.00	84.00	85.00	86.00	87.00	88.00	89.00

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
40....	18.00	18.20	18.40	18.60	18.80	19.00	19.20	19.40
41....	18.45	18.65	18.86	19.06	19.27	19.47	19.68	19.88
42....	18.90	19.11	19.32	19.53	19.74	19.95	20.16	20.37
43....	19.35	19.56	19.78	19.99	20.21	20.42	20.64	20.85
44....	19.80	20.02	20.24	20.46	20.68	20.90	21.12	21.34
45....	20.25	20.47	20.70	20.92	21.15	21.37	21.60	21.82
46....	20.70	20.93	21.16	21.39	21.62	21.85	22.08	22.31
47....	21.15	21.38	21.62	21.85	22.09	22.32	22.56	22.79
48....	21.60	21.84	22.08	22.32	22.56	22.80	23.04	23.28
49....	22.05	22.29	22.54	22.78	23.03	23.27	23.52	23.76
50....	22.50	22.75	23.00	23.25	23.50	23.75	24.00	24.25
51....	22.95	23.20	23.46	23.71	23.97	24.22	24.48	24.73
52....	23.40	23.66	23.92	24.18	24.44	24.70	24.96	25.22
53....	23.85	24.11	24.38	24.64	24.91	25.17	25.44	25.70
54....	24.30	24.57	24.84	25.11	25.38	25.65	25.92	26.19
55....	24.75	25.02	25.30	25.57	25.85	26.12	26.40	26.67
56....	25.20	25.48	25.76	26.04	26.32	26.60	26.88	27.16
57....	25.65	25.93	26.22	26.50	26.79	27.07	27.36	27.64
58....	26.10	26.39	26.68	26.97	27.26	27.55	27.84	28.13
59....	26.55	26.84	27.14	27.43	27.73	28.02	28.32	28.61
60....	27.00	27.30	27.60	27.90	28.20	28.50	28.80	29.10
61....	27.45	27.75	28.06	28.36	28.67	28.97	29.28	29.58
62....	27.90	28.21	28.52	28.83	29.14	29.45	29.76	30.07
63....	28.35	28.66	28.98	29.29	29.61	29.92	30.24	30.55
64....	28.80	29.12	29.44	29.76	30.08	30.40	30.72	31.04
65....	29.25	29.57	29.90	30.22	30.55	30.87	31.20	31.52
66....	29.70	30.03	30.36	30.69	31.02	31.35	31.68	32.01
67....	30.15	30.48	30.82	31.15	31.49	31.82	32.16	32.49
68....	30.60	30.94	31.28	31.62	31.96	32.30	32.64	32.98
69....	31.05	31.39	31.74	32.08	32.43	32.77	33.12	33.46
70....	31.50	31.85	32.20	32.55	32.90	33.25	33.60	33.95
71....	31.95	32.30	32.66	33.01	33.37	33.72	34.08	34.43
72....	32.40	32.76	33.12	33.48	33.84	34.20	34.56	34.92
73....	32.85	33.21	33.58	33.94	34.31	34.67	35.04	35.40
74....	33.30	33.67	34.04	34.41	34.78	35.15	35.52	35.89
75....	33.75	34.12	34.50	34.87	35.25	35.62	36.00	36.37
76....	34.20	34.58	34.96	35.34	35.72	36.10	36.48	36.86
77....	34.65	35.03	35.42	35.80	36.19	36.57	36.96	37.34
78....	35.10	35.49	35.88	36.27	36.66	37.05	37.44	37.83
79....	35.55	35.94	36.34	36.73	37.13	37.52	37.92	38.31
80....	36.00	36.40	36.80	37.20	37.60	38.00	38.40	38.80
81....	36.45	36.85	37.26	37.66	38.07	38.47	38.88	39.28
82....	36.90	37.31	37.72	38.13	38.54	38.95	39.36	39.77
83....	37.35	37.76	38.18	38.59	39.01	39.42	39.84	40.25
84....	37.80	38.22	38.64	39.06	39.48	39.90	40.32	40.74
85....	38.25	38.67	39.10	39.52	39.95	40.37	40.80	41.22

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
86...	38.70	39.13	39.56	39.99	40.42	40.85	41.28	41.71
87...	39.15	39.58	40.02	40.45	40.89	41.32	41.76	42.19
88...	39.60	40.04	40.48	40.92	41.36	41.80	42.24	42.68
89...	40.05	40.49	40.94	41.38	41.83	42.27	42.72	43.16
90...	40.50	40.95	41.40	41.85	42.30	42.75	43.20	43.65
91...	40.95	41.40	41.86	42.31	42.77	43.22	43.68	44.13
92...	41.40	41.86	42.32	42.78	43.24	43.70	44.16	44.62
93...	41.85	42.31	42.78	43.24	43.71	44.17	44.64	45.10
94...	42.30	42.77	43.24	43.71	44.18	44.65	45.12	45.59
95...	42.75	43.22	43.70	44.17	44.65	45.12	45.60	46.07
96...	43.20	43.68	44.16	44.64	45.12	45.60	46.08	46.56
97...	43.65	44.13	44.62	45.10	45.59	46.07	46.56	47.04
98...	44.10	44.59	45.08	45.57	46.06	46.55	47.04	47.53
99...	44.55	45.04	45.54	46.03	46.53	47.02	47.52	48.01
100...	45.00	45.50	46.00	46.50	47.00	47.50	48.00	48.50
101...	45.45	45.95	46.46	46.96	47.47	47.97	48.48	48.98
102...	45.90	46.41	46.92	47.43	47.94	48.45	48.96	49.47
103...	46.35	46.86	47.38	47.89	48.41	48.92	49.44	49.95
104...	46.80	47.32	47.84	48.36	48.88	49.40	49.92	50.44
105...	47.25	47.77	48.30	48.82	49.35	49.87	50.40	50.92
106...	47.70	48.23	48.76	49.29	49.82	50.35	50.88	51.41
107...	48.15	48.68	49.22	49.75	50.29	50.82	51.36	51.89
108...	48.60	49.14	49.68	50.22	50.76	51.30	51.84	52.38
109...	49.05	49.59	50.14	50.68	51.23	51.77	52.32	52.86
110...	49.50	50.05	50.60	51.15	51.70	52.25	52.80	53.35
111...	49.95	50.50	51.06	51.61	52.17	52.72	53.28	53.83
112...	50.40	50.96	51.52	52.08	52.64	53.20	53.76	54.32
113...	50.85	51.41	51.98	52.54	53.11	53.67	54.24	54.80
114...	51.30	51.87	52.44	53.01	53.58	54.15	54.72	55.29
115...	51.75	52.32	52.90	53.47	54.05	54.62	55.20	55.77
116...	52.20	52.78	53.36	53.94	54.52	55.10	55.68	56.26
117...	52.65	53.23	53.82	54.40	54.99	55.57	56.16	56.74
118...	53.10	53.69	54.28	54.87	55.46	56.05	56.64	57.23
119...	53.55	54.14	54.74	55.33	55.93	56.52	57.12	57.71
120...	54.00	54.60	55.20	55.80	56.40	57.00	57.60	58.20
121...	54.45	55.05	55.66	56.26	56.87	57.47	58.08	58.68
122...	54.90	55.51	56.12	56.73	57.34	57.95	58.56	59.17
123...	55.35	55.96	56.58	57.19	57.81	58.42	59.04	59.65
124...	55.80	56.42	57.04	57.66	58.28	58.90	59.52	60.14
125...	56.25	56.87	57.50	58.12	58.75	59.37	60.00	60.62
126...	56.70	57.33	57.96	58.59	59.22	59.85	60.48	61.11
127...	57.15	57.78	58.42	59.05	59.69	60.32	60.96	61.59
128...	57.60	58.24	58.88	59.52	60.16	60.80	61.44	62.08
129...	58.05	58.69	59.34	59.98	60.63	61.27	61.92	62.56
130...	58.50	59.15	59.80	60.45	61.10	61.75	62.40	63.05
131...	58.95	59.60	60.26	60.91	61.57	62.22	62.88	63.53

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
132...	59.40	60.06	60.72	61.38	62.04	62.70	63.36	64.02
133...	59.85	60.51	61.18	61.84	62.51	63.17	63.84	64.50
134...	60.30	60.97	61.64	62.31	62.98	63.65	64.32	64.99
135...	60.75	61.42	62.10	62.77	63.45	64.12	64.80	65.47
136...	61.20	61.88	62.56	63.24	63.92	64.60	65.28	65.96
137...	61.65	62.33	63.02	63.70	64.39	65.07	65.76	66.44
138...	62.10	62.79	63.48	64.17	64.86	65.55	66.24	66.93
139...	62.55	63.24	63.94	64.63	65.33	66.02	66.72	67.41
140...	63.00	63.70	64.40	65.10	65.80	66.50	67.20	67.90
141...	63.45	64.15	64.86	65.56	66.27	66.97	67.68	68.38
142...	63.90	64.61	65.32	66.03	66.74	67.45	68.16	68.87
143...	64.35	65.06	65.78	66.49	67.21	67.92	68.64	69.35
144...	64.80	65.52	66.24	66.96	67.68	68.40	69.12	69.84
145...	65.25	65.97	66.70	67.42	68.15	68.87	69.60	70.32
146...	65.70	66.43	67.16	67.89	68.62	69.35	70.08	70.81
147...	66.15	66.88	67.62	68.35	69.09	69.82	70.56	71.29
148...	66.60	67.34	68.08	68.82	69.56	70.30	71.04	71.78
149...	67.05	67.79	68.54	69.28	70.03	70.77	71.52	72.26
150...	67.50	68.25	69.00	69.75	70.50	71.25	72.00	72.75
151...	67.95	68.70	69.46	70.21	70.97	71.72	72.48	73.23
152...	68.40	69.16	69.92	70.68	71.44	72.20	72.96	73.72
153...	68.85	69.61	70.38	71.14	71.91	72.67	73.44	74.20
154...	69.30	70.07	70.84	71.61	72.38	73.15	73.92	74.69
155...	69.75	70.52	71.30	72.07	72.85	73.62	74.40	75.17
156...	70.20	70.98	71.76	72.54	73.32	74.10	74.88	75.66
157...	70.65	71.43	72.22	73.00	73.79	74.57	75.36	76.14
158...	71.10	71.89	72.68	73.47	74.26	75.05	75.84	76.63
159...	71.55	72.34	73.14	73.93	74.73	75.52	76.32	77.11
160...	72.00	72.80	73.60	74.40	75.20	76.00	76.80	77.60
161...	72.45	73.25	74.06	74.86	75.67	76.47	77.28	78.08
162...	72.90	73.71	74.52	75.33	76.14	76.95	77.76	78.57
163...	73.35	74.16	74.98	75.79	76.61	77.42	78.24	79.05
164...	73.80	74.62	75.44	76.26	77.08	77.90	78.72	79.54
165...	74.25	75.07	75.90	76.72	77.55	78.37	79.20	80.02
166...	74.70	75.53	76.36	77.19	78.02	78.85	79.68	80.51
167..	75.15	75.98	76.82	77.65	78.49	79.32	80.16	80.99
168...	75.60	76.44	77.28	78.12	78.96	79.80	80.64	81.48
169...	76.05	76.89	77.74	78.58	79.43	80.27	81.12	81.96
170...	76.50	77.35	78.20	79.05	79.90	80.75	81.60	82.45
171...	76.95	77.80	78.66	79.51	80.37	81.22	82.08	82.93
172...	77.40	78.26	79.12	79.98	80.84	81.70	82.56	83.42
173...	77.85	78.71	79.58	80.44	81.31	82.17	83.04	83.90
174...	78.30	79.17	80.04	80.91	81.78	82.65	83.52	84.39
175...	78.75	79.62	80.50	81.37	82.25	83.12	84.00	84.87
176...	79.20	80.08	80.96	81.84	82.72	83.60	84.48	85.36
177...	79.65	80.53	81.42	82.30	83.19	84.07	84.96	85.84

True per cent. of proof.	WINE-GALLONS.							
	45	45½	46	46½	47	47½	48	48½
178...	80.10	80.99	81.88	82.77	83.66	84.55	85.44	86.33
179...	80.55	81.44	82.34	83.23	84.13	85.02	85.92	86.81
180...	81.00	81.90	82.80	83.70	84.60	85.50	86.40	87.30
181...	81.45	82.35	83.26	84.16	85.07	85.97	86.88	87.78
182...	81.90	82.81	83.72	84.63	85.54	86.45	87.36	88.27
183...	82.35	83.26	84.18	85.09	86.01	86.92	87.84	88.75
184...	82.80	83.72	84.64	85.56	86.48	87.40	88.32	89.24
185...	83.25	84.17	85.10	86.02	86.95	87.87	88.80	89.72
186...	83.70	84.63	85.56	86.49	87.42	88.35	89.28	90.21
187...	84.15	85.08	86.02	86.95	87.89	88.82	89.76	90.69
188...	84.60	85.54	86.48	87.42	88.36	89.30	90.24	91.18
189...	85.05	85.99	86.94	87.88	88.83	89.77	90.72	91.66
190...	85.50	86.45	87.40	88.35	89.30	90.25	91.20	92.15
191...	85.95	86.90	87.86	88.81	89.77	90.72	91.68	92.63
192...	86.40	87.36	88.32	89.28	90.24	91.20	92.16	93.12
193...	86.85	87.81	88.78	89.74	90.71	91.67	92.64	93.60
194...	87.30	88.27	89.24	90.21	91.18	92.15	93.12	94.09
195...	87.75	88.72	89.70	90.67	91.65	92.62	93.60	94.57
196...	88.20	89.18	90.16	91.14	92.12	93.10	94.08	95.06
197...	88.65	89.63	90.62	91.60	92.59	93.57	94.56	95.54
198...	89.10	90.09	91.08	92.07	93.06	94.05	95.04	96.03
199...	89.55	90.54	91.54	92.53	93.53	94.52	95.52	96.51
200...	90.00	91.00	92.00	93.00	94.00	95.00	96.00	97.00

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
40....	19.60	19.80	20.00	20.20	20.40	20.60	20.80	21.00
41....	20.09	20.29	20.50	20.70	20.91	21.11	21.32	21.52
42....	20.58	20.79	21.00	21.21	21.42	21.63	21.84	22.05
43....	21.07	21.28	21.50	21.71	21.93	22.14	22.36	22.57
44....	21.56	21.78	22.00	22.22	22.44	22.66	22.88	23.10
45....	22.05	22.27	22.50	22.72	22.95	23.17	23.40	23.62
46....	22.54	22.77	23.00	23.23	23.46	23.69	23.92	24.15
47....	23.03	23.26	23.50	23.73	23.97	24.20	24.44	24.67
48....	23.52	23.76	24.00	24.24	24.48	24.72	24.96	25.20
49....	24.01	24.25	24.50	24.74	24.99	25.23	25.48	25.72
50....	24.50	24.75	25.00	25.25	25.50	25.75	26.00	26.25
51....	24.99	25.24	25.50	25.75	26.01	26.26	26.52	26.77
52....	25.48	25.74	26.00	26.26	26.52	26.78	27.04	27.30
53....	25.97	26.23	26.50	26.76	27.03	27.29	27.56	27.82
54....	26.46	26.73	27.00	27.27	27.54	27.81	28.08	28.35
55....	26.95	27.22	27.50	27.77	28.05	28.32	28.60	28.87
56....	27.44	27.72	28.00	28.28	28.56	28.84	29.12	29.40
57....	27.93	28.21	28.50	28.78	29.07	29.35	29.64	29.92
58....	28.42	28.71	29.00	29.29	29.58	29.87	30.16	30.45
59....	28.91	29.20	29.50	29.79	30.09	30.38	30.68	30.97
60....	29.40	29.70	30.00	30.30	30.60	30.90	31.20	31.50
61....	29.89	30.19	30.50	30.80	31.11	31.41	31.72	32.02
62....	30.38	30.69	31.00	31.31	31.62	31.93	32.24	32.55
63....	30.87	31.18	31.50	31.81	32.13	32.44	32.76	33.07
64....	31.36	31.68	32.00	32.32	32.64	32.96	33.28	33.60
65....	31.85	32.17	32.50	32.82	33.15	33.47	33.80	34.12
66....	32.34	32.67	33.00	33.33	33.66	33.99	34.32	34.65
67....	32.83	33.16	33.50	33.83	34.17	34.50	34.84	35.17
68....	33.32	33.66	34.00	34.34	34.68	35.02	35.36	35.70
69....	33.81	34.15	34.50	34.84	35.19	35.53	35.88	36.22
70....	34.30	34.65	35.00	35.35	35.70	36.05	36.40	36.75
71....	34.79	35.14	35.50	35.85	36.21	36.56	36.92	37.27
72....	35.28	35.64	36.00	36.36	36.72	37.08	37.44	37.80
73....	35.77	36.13	36.50	36.86	37.23	37.59	37.96	38.32
74....	36.26	36.63	37.00	37.37	37.74	38.11	38.48	38.85
75....	36.75	37.12	37.50	37.87	38.25	38.62	39.00	39.37
76....	37.24	37.62	38.00	38.38	38.76	39.14	39.52	39.90
77....	37 73	38.11	38.50	38.88	39.27	39.65	40.04	40.42
78....	38.22	38.61	39.00	39.39	39.78	40.17	40.56	40.95
79....	38.71	39.10	39.50	39.89	40.29	40.68	41.08	41.47
80....	39.20	39.60	40.00	40.40	40.80	41.20	41.60	42.00
81....	39.69	40.09	40.50	40.90	41.31	41.71	42.12	42.52
82....	40.18	40.59	41.00	41.41	41.82	42.23	42.64	43.05
83....	40.67	41.08	41.50	41.91	42.33	42.74	43.16	43.57
84....	41.16	41.58	42.00	42.42	42.84	43.26	43.68	44.10
85....	41.65	42.07	42.50	42.92	43.35	43.77	44.20	44.62

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
86...	42.14	42.57	43.00	43.43	43.86	44.29	44.72	45.15
87...	42.63	43.06	43.50	43.93	44.37	44.80	45.24	45.67
88...	43.12	43.56	44.00	44.44	44.88	45.32	45.76	46.20
89...	43.61	44.05	44.50	44.94	45.39	45.83	46.28	46.72
90...	44.10	44.55	45.00	45.45	45.90	46.35	46.80	47.25
91...	44.59	45.04	45.50	45.95	46.41	46.86	47.32	47.77
92...	45.08	45.54	46.00	46.46	46.92	47.38	47.84	48.30
93...	45.57	46.03	46.50	46.96	47.43	47.89	48.36	48.82
94...	46.06	46.53	47.00	47.47	47.94	48.41	48.88	49.35
95...	46.55	47.02	47.50	47.97	48.45	48.92	49.40	49.87
96...	47.04	47.52	48.00	48.48	48.96	49.44	49.92	50.40
97...	47.53	48.01	48.50	48.98	49.47	49.95	50.44	50.92
98...	48.02	48.51	49.00	49.49	49.98	50.47	50.96	51.45
99...	48.51	49.00	49.50	49.99	50.49	50.98	51.48	51.97
100...	49.00	49.50	50.00	50.50	51.00	51.50	52.00	52.50
101...	49.49	49.99	50.50	51.00	51.51	52.01	52.52	53.02
102...	49.98	50.49	51.00	51.51	52.02	52.53	53.04	53.55
103...	50.47	50.98	51.50	52.01	52.53	53.04	53.56	54.07
104...	50.96	51.48	52.00	52.52	53.04	53.56	54.08	54.60
105...	51.45	51.97	52.50	53.02	53.55	54.07	54.60	55.12
106...	51.94	52.47	53.00	53.53	54.06	54.59	55.12	55.65
107...	52.43	52.96	53.50	54.03	54.57	55.10	55.64	56.17
108...	52.92	53.46	54.00	54.54	55.08	55.62	56.16	56.70
109...	53.41	53.95	54.50	55.04	55.59	56.13	56.68	57.22
110...	53.90	54.45	55.00	55.55	56.10	56.65	57.20	57.75
111...	54.39	54.94	55.50	56.05	56.61	57.16	57.72	58.27
112...	54.88	55.44	56.00	56.56	57.12	57.68	58.24	58.80
113...	55.37	55.93	56.50	57.06	57.63	58.19	58.76	59.32
114...	55.86	56.43	57.00	57.57	58.14	58.71	59.28	59.85
115...	56.35	56.92	57.50	58.07	58.65	59.22	59.80	60.37
116...	56.84	57.42	58.00	58.58	59.16	59.74	60.32	60.90
117...	57.33	57.91	58.50	59.08	59.67	60.25	60.84	61.42
118...	57.82	58.41	59.00	59.59	60.18	60.77	61.36	61.95
119...	58.31	58.90	59.50	60.09	60.69	61.28	61.88	62.47
120...	58.80	59.40	60.00	60.60	61.20	61.80	62.40	63.00
121...	59.29	59.89	60.50	61.10	61.71	62.31	62.92	63.52
122...	59.78	60.39	61.00	61.61	62.22	62.83	63.44	64.05
123...	60.27	60.88	61.50	62.11	62.73	63.34	63.96	64.57
124...	60.76	61.38	62.00	62.62	63.24	63.86	64.48	65.10
125...	61.25	61.87	62.50	63.12	63.75	64.37	65.00	65.62
126...	61.74	62.37	63.00	63.63	64.26	64.89	65.52	66.15
127...	62.23	62.86	63.50	64.13	64.77	65.40	66.04	66.67
128...	62.72	63.36	64.00	64.64	65.28	65.92	66.56	67.20
129...	63.21	63.85	64.50	65.14	65.79	66.43	67.08	67.72
130...	63.70	64.35	65.00	65.65	66.30	66.95	67.60	68.25
131...	64.19	64.84	65.50	66.15	66.81	67.46	68.12	68.77

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
132...	64.68	65.34	66.00	66.66	67.32	67.98	68.64	69.30
133...	65.17	65.83	66.50	67.16	67.83	68.49	69.16	69.82
134...	65.66	66.33	67.00	67.67	68.34	69.01	69.68	70.35
135...	66.15	66.82	67.50	68.17	68.85	69.52	70.20	70.87
136...	66.64	67.32	68.00	68.68	69.36	70.04	70.72	71.40
137...	67.13	67.81	68.50	69.18	69.87	70.55	71.24	71.92
138...	67.62	68.31	69.00	69.69	70.38	71.07	71.76	72.45
139...	68.11	68.80	69.50	70.19	70.89	71.58	72.28	72.97
140...	68.60	69.30	70.00	70.70	71.40	72.10	72.80	73.50
141...	69.09	69.79	70.50	71.20	71.91	72.61	73.32	74.02
142...	69.58	70.29	71.00	71.71	72.42	73.13	73.84	74.55
143...	70.07	70.78	71.50	72.21	72.93	73.64	74.36	75.07
144...	70.56	71.28	72.00	72.72	73.44	74.16	74.88	75.60
145...	71.05	71.77	72.50	73.22	73.95	74.67	75.40	76.12
146...	71.54	72.27	73.00	73.73	74.46	75.19	75.92	76.65
147...	72.03	72.76	73.50	74.23	74.97	75.70	76.44	77.17
148...	72.52	73.26	74.00	74.74	75.48	76.22	76.96	77.70
149...	73.01	73.75	74.50	75.24	75.99	76.73	77.48	78.22
150...	73.50	74.25	75.00	75.75	76.50	77.25	78.00	78.75
151...	73.99	74.74	75.50	76.25	77.01	77.76	78.52	79.27
152...	74.48	75.24	76.00	76.76	77.52	78.28	79.04	79.80
153...	74.97	75.73	76.50	77.26	78.03	78.79	79.56	80.32
154...	75.46	76.23	77.00	77.77	78.54	79.31	80.08	80.85
155...	75.95	76.72	77.50	78.27	79.05	79.82	80.60	81.37
156...	76.44	77.22	78.00	78.78	79.56	80.34	81.12	81.90
157...	76.93	77.71	78.50	79.28	80.07	80.85	81.64	82.42
158...	77.42	78.21	79.00	79.79	80.58	81.37	82.16	82.95
159...	77.91	78.70	79.50	80.29	81.09	81.88	82.68	83.47
160...	78.40	79.20	80.00	80.80	81.60	82.40	83.20	84.00
161...	78.89	79.69	80.50	81.30	82.11	82.91	83.72	84.52
162...	79.38	80.19	81.00	81.81	82.62	83.43	84.24	85.05
163...	79.87	80.68	81.50	82.31	83.13	83.94	84.76	85.57
164...	80.36	81.18	82.00	82.82	83.64	84.46	85.28	86.10
165...	80.85	81.67	82.50	83.32	84.15	84.97	85.80	86.62
166...	81.34	82.17	83.00	83.83	84.66	85.49	86.32	87.15
167...	81.83	82.66	83.50	84.33	85.17	86.00	86.84	87.67
168...	82.32	83.16	84.00	84.84	85.68	86.52	87.36	88.20
169...	82.81	83.65	84.50	85.34	86.19	87.03	87.88	88.72
170...	83.30	84.15	85.00	85.85	86.70	87.55	88.40	89.25
171...	83.79	84.64	85.50	86.35	87.21	88.06	88.92	89.77
172...	84.28	85.14	86.00	86.86	87.72	88.58	89.44	90.30
173...	84.77	85.63	86.50	87.36	88.23	89.09	89.96	90.82
174...	85.26	86.13	87.00	87.87	88.74	89.61	90.48	91.35
175...	85.75	86.62	87.50	88.37	89.25	90.12	91.00	91.87
176...	86.24	87.12	88.00	88.88	89.76	90.64	91.52	92.40
177...	86.73	87.61	88.50	89.38	90.27	91.15	92.04	92.92

True per cent. of proof.	WINE-GALLONS.							
	49	49½	50	50½	51	51½	52	52½
178...	87.22	88.11	89.00	89.89	90.78	91.67	92.56	93.45
179...	87.71	88.60	89.50	90.39	91.29	92.18	93.08	93.97
180...	88.20	89.10	90.00	90.90	91.80	92.70	93.60	94.50
181...	88.69	89.59	90.50	91.40	92.31	93.21	94.12	95.02
182...	89.18	90.09	91.00	91.91	92.82	93.73	94.64	95.55
183...	89.67	90.58	91.50	92.41	93.33	94.24	95.16	96.07
184...	90.16	91.08	92.00	92.92	93.84	94.76	95.68	96.60
185...	90.65	91.57	92.50	93.42	94.35	95.27	96.20	97.12
186...	91.14	92.07	93.00	93.93	94.86	95.79	96.72	97.65
187...	91.63	92.56	93.50	94.43	95.37	96.30	97.24	98.17
188...	92.12	93.06	94.00	94.94	95.88	96.82	97.76	98.70
189...	92.61	93.55	94.50	95.44	96.39	97.33	98.28	99.22
190...	93.10	94.05	95.00	95.95	96.90	97.85	98.80	99.75
191...	93.59	94.54	95.50	96.45	97.41	98.36	99.32	100.27
192...	94.08	95.04	96.00	96.96	97.92	98.88	99.84	100.80
193...	94.57	95.53	96.50	97.46	98.43	99.39	100.36	101.32
194...	95.06	96.03	97.00	97.97	98.94	99.91	100.88	101.85
195...	95.55	96.52	97.50	98.47	99.45	100.42	101.40	102.37
196...	96.04	97.02	98.00	98.98	99.96	100.94	101.92	102.90
197...	96.53	97.51	98.50	99.48	100.47	101.45	102.44	103.42
198...	97.02	98.01	99.00	99.99	100.98	101.97	102.96	103.95
199...	97.51	98.50	99.50	100.49	101.49	102.48	103.48	104.47
200...	98.00	99.00	100.00	101.00	102.00	103.00	104.00	105.00

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
40	21.20	21.40	21.60	21.80	22.00	22.20	22.40	22.60
41	21.73	21.93	22.14	22.34	22.55	22.75	22.96	23.16
42	22.26	22.47	22.68	22.89	23.10	23.31	23.52	23.73
43	22.79	23.00	23.22	23.43	23.65	23.86	24.08	24.29
44	23.32	23.54	23.76	23.98	24.20	24.42	24.64	24.86
45	23.85	24.07	24.30	24.52	24.75	24.97	25.20	25.42
46	24.38	24.61	24.84	25.07	25.30	25.53	25.76	25.99
47	24.91	25.14	25.38	25.61	25.85	26.08	26.32	26.55
48	25.44	25.68	25.92	26.16	26.40	26.64	26.88	27.12
49	25.97	26.21	26.46	26.70	26.95	27.19	27.44	27.68
50	26.50	26.75	27.00	27.25	27.50	27.75	28.00	28.25
51	27.03	27.28	27.54	27.79	28.05	28.30	28.56	28.81
52	27.56	27.82	28.08	28.34	28.60	28.86	29.12	29.38
53	28.09	28.35	28.62	28.88	29.15	29.41	29.68	29.94
54	28.62	28.89	29.16	29.43	29.70	29.97	30.24	30.51
55	29.15	29.42	29.70	29.97	30.25	30.52	30.80	31.07
56	29.68	29.96	30.24	30.52	30.80	31.08	31.36	31.64
57	30.21	30.49	30.78	31.06	31.35	31.63	31.92	32.20
58	30.74	31.03	31.32	31.61	31.90	32.19	32.48	32.77
59	31.27	31.56	31.86	32.15	32.45	32.74	33.04	33.33
60	31.80	32.10	32.40	32.70	33.00	33.30	33.60	33.90
61	32.33	32.63	32.94	33.24	33.55	33.85	34.16	34.46
62	32.86	33.17	33.48	33.79	34.10	34.41	34.72	35.03
63	33.39	33.70	34.02	34.33	34.65	34.96	35.28	35.59
64	33.92	34.24	34.56	34.88	35.20	35.52	35.84	36.16
65	34.45	34.77	35.10	35.42	35.75	36.07	36.40	36.72
66	34.98	35.31	35.64	35.97	36.30	36.63	36.96	37.29
67	35.51	35.84	36.18	36.51	36.85	37.18	37.52	37.85
68	36.04	36.38	36.72	37.06	37.40	37.74	38.08	38.42
69	36.57	36.91	37.26	37.60	37.95	38.29	38.64	38.98
70	37.10	37.45	37.80	38.15	38.50	38.85	39.20	39.55
71	37.63	37.98	38.34	38.69	39.05	39.40	39.76	40.11
72	38.16	38.52	38.88	39.24	39.60	39.96	40.32	40.68
73	38.69	39.05	39.42	39.78	40.15	40.51	40.88	41.24
74	39.22	39.59	39.96	40.33	40.70	41.07	41.44	41.81
75	39.75	40.12	40.50	40.87	41.25	41.62	42.00	42.37
76	40.28	40.66	41.04	41.42	41.80	42.18	42.56	42.94
77	40.81	41.19	41.58	41.96	42.35	42.73	43.12	43.50
78	41.34	41.73	42.12	42.51	42.90	43.29	43.68	44.07
79	41.87	42.26	42.66	43.05	43.45	43.84	44.24	44.63
80	42.40	42.80	43.20	43.60	44.00	44.40	44.80	45.20
81	42.93	43.33	43.74	44.14	44.55	44.95	45.36	45.76
82	43.46	43.87	44.28	44.69	45.10	45.51	45.92	46.33
83	43.99	44.40	44.82	45.23	45.65	46.06	46.48	46.89
84	44.52	44.94	45.36	45.78	46.20	46.62	47.04	47.46
85	45.05	45.47	45.90	46.32	46.75	47.17	47.60	48.02

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
86...	45.58	46.01	46.44	46.87	47.30	47.73	48.16	48.59
87...	46.11	46.54	46.98	47.41	47.85	48.28	48.72	49.15
88...	46.64	47.08	47.52	47.96	48.40	48.84	49.28	49.72
89...	47.17	47.61	48.06	48.50	48.95	49.39	49.84	50.28
90...	47.70	48.15	48.60	49.05	49.50	49.95	50.40	50.85
91...	48.23	48.68	49.14	49.59	50.05	50.50	50.96	51.41
92...	48.76	49.22	49.68	50.14	50.60	51.06	51.52	51.98
93...	49.29	49.75	50.22	50.68	51.15	51.61	52.08	52.54
94...	49.82	50.29	50.76	51.23	51.70	52.17	52.64	53.11
95...	50.35	50.82	51.30	51.77	52.25	52.72	53.20	53.67
96...	50.88	51.36	51.84	52.32	52.80	53.28	53.76	54.24
97...	51.41	51.89	52.38	52.86	53.35	53.83	54.32	54.80
98...	51.94	52.43	52.92	53.41	53.90	54.39	54.88	55.37
99...	52.47	52.96	53.46	53.95	54.45	54.94	55.44	55.93
100...	53.00	53.50	54.00	54.50	55.00	55.50	56.00	56.50
101...	53.53	54.03	54.54	55.04	55.55	56.05	56.56	57.06
102...	54.06	54.57	55.08	55.59	56.10	56.61	57.12	57.63
103...	54.59	55.10	55.62	56.13	56.65	57.16	57.68	58.19
104...	55.12	55.64	56.16	56.68	57.20	57.72	58.24	58.76
105...	55.65	56.17	56.70	57.22	57.75	58.27	58.80	59.32
106...	56.18	56.71	57.24	57.77	58.30	58.83	59.36	59.89
107...	56.71	57.24	57.78	58.31	58.85	59.38	59.92	60.45
108...	57.24	57.78	58.32	58.86	59.40	59.94	60.48	61.02
109...	57.77	58.31	58.86	59.40	59.95	60.49	61.04	61.58
110...	58.30	58.85	59.40	59.95	60.50	61.05	61.60	62.15
111...	58.83	59.38	59.94	60.49	61.05	61.60	62.16	62.71
112...	59.36	59.92	60.48	61.04	61.60	62.16	62.72	63.28
113...	59.89	60.45	61.02	61.58	62.15	62.71	63.28	63.84
114...	60.42	60.99	61.56	62.13	62.70	63.27	63.84	64.41
115...	60.95	61.52	62.10	62.67	63.25	63.82	64.40	64.97
116...	61.48	62.06	62.64	63.22	63.80	64.38	64.96	65.54
117...	62.01	62.59	63.18	63.76	64.35	64.93	65.52	66.10
118...	62.54	63.13	63.72	64.31	64.90	65.49	66.08	66.67
119...	63.07	63.66	64.26	64.85	65.45	66.04	66.64	67.23
120...	63.60	64.20	64.80	65.40	66.00	66.60	67.20	67.80
121...	64.13	64.73	65.34	65.94	66.55	67.15	67.76	68.36
122...	64.66	65.27	65.88	66.49	67.10	67.71	68.32	68.93
123...	65.19	65.80	66.42	67.03	67.65	68.26	68.88	69.49
124...	65.72	66.34	66.96	67.58	68.20	68.82	69.44	70.06
125...	66.25	66.87	67.50	68.12	68.75	69.37	70.00	70.62
126...	66.78	67.41	68.04	68.67	69.36	69.93	70.56	71.19
127...	67.31	67.94	68.58	69.21	69.85	70.48	71.12	71.75
128...	67.84	68.48	69.12	69.76	70.40	71.04	71.68	72.32
129...	68.37	69.01	69.66	70.30	70.95	71.59	72.24	72.88
130...	68.90	69.55	70.20	70.85	71.50	72.15	72.80	73.45
131...	69.43	70.08	70.74	71.39	72.05	72.70	73.36	74.01

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
132...	69.96	70.62	71.28	71.94	72.60	73.26	73.92	74.58
133...	70.49	71.15	71.82	72.48	73.15	73.81	74.48	75.14
134...	71.02	71.69	72.36	73.03	73.70	74.37	75.04	75.71
135...	71.55	72.22	72.90	73.57	74.25	74.92	75.60	76.27
136...	72.08	72.76	73.44	74.12	74.80	75.48	76.16	76.84
137...	72.61	73.29	73.98	74.66	75.35	76.03	76.72	77.40
138...	73.14	73.83	74.52	75.21	75.90	76.59	77.28	77.97
139...	73.67	74.36	75.06	75.75	76.45	77.14	77.84	78.53
140...	74.20	74.90	75.60	76.30	77.00	77.70	78.40	79.10
141...	74.73	75.43	76.14	76.84	77.55	78.25	78.96	79.36
142...	75.26	75.97	76.68	77.39	78.10	78.81	79.52	80.23
143...	75.79	76.50	77.22	77.93	78.65	79.36	80.08	80.79
144...	76.32	77.04	77.76	78.48	79.20	79.92	80.64	81.36
145...	76.85	77.57	78.30	79.02	79.75	80.47	81.20	81.92
146...	77.38	78.11	78.84	79.57	80.30	81.03	81.76	82.49
147...	77.91	78.64	79.38	80.11	80.85	81.58	82.32	83.05
148...	78.44	79.18	79.92	80.66	81.40	82.14	82.88	83.62
149...	78.97	79.71	80.46	81.20	81.95	82.69	83.44	84.18
150...	79.50	80.25	81.00	81.75	82.50	83.25	84.00	84.75
151...	80.03	80.78	81.54	82.29	83.05	83.80	84.56	85.31
152...	80.56	81.32	82.08	82.84	83.60	84.36	85.12	85.88
153...	81.09	81.85	82.62	83.38	84.15	84.91	85.68	86.44
154...	81.62	82.39	83.16	83.93	84.70	85.47	86.24	87.01
155...	82.15	82.92	83.70	84.47	85.25	86.02	86.80	87.57
156...	82.68	83.46	84.24	85.02	85.80	86.58	87.36	88.14
157...	83.21	83.99	84.78	85.56	86.35	87.13	87.92	88.70
158...	83.74	84.53	85.32	86.11	86.90	87.69	88.48	89.27
159...	84.27	85.06	85.86	86.65	87.45	88.24	89.04	89.83
160...	84.80	85.60	86.40	87.20	88.00	88.80	89.60	90.40
161...	85.33	86.13	86.94	87.74	88.55	89.35	90.16	90.96
162...	85.86	86.67	87.48	88.29	89.10	89.91	90.72	91.53
163...	86.39	87.20	88.02	88.83	89.65	90.46	91.28	92.09
164...	86.92	87.74	88.56	89.38	90.20	91.02	91.84	92.66
165...	87.45	88.27	89.10	89.92	90.75	91.57	92.40	93.22
166...	87.98	88.81	89.64	90.47	91.30	92.13	92.96	93.79
167...	88.51	89.34	90.18	91.01	91.85	92.68	93.52	94.35
168...	89.04	89.88	90.72	91.56	92.40	93.24	94.08	94.92
169...	89.57	90.41	91.26	92.10	92.95	93.79	94.64	95.48
170...	90.10	90.95	91.80	92.65	93.50	94.35	95.20	96.05
171...	90.63	91.48	92.34	93.19	94.05	94.90	95.76	96.61
172...	91.16	92.02	92.88	93.74	94.60	95.46	96.32	97.18
173...	91.69	92.55	93.42	94.28	95.15	96.01	96.88	97.74
174...	92.22	93.09	93.96	94.83	95.70	96.57	97.44	98.31
175...	92.75	93.62	94.50	95.37	96.25	97.12	98.00	98.87
176...	93.28	94.16	95.04	95.92	96.80	97.68	98.56	99.44
177...	93.81	94.69	95.58	96.46	97.35	98.23	99.12	100.00

True per cent. of proof.	WINE-GALLONS.							
	53	53½	54	54½	55	55½	56	56½
178...	94.34	95.23	96.12	97.01	97.90	98.79	99.68	100.57
179...	94.87	95.76	96.66	97.55	98.45	99.34	100.24	101.13
180...	95.40	96.30	97.20	98.10	99.00	99.90	100.80	101.70
181...	95.93	96.83	97.74	98.64	99.55	100.45	101.36	102.26
182...	96.46	97.37	98.28	99.19	100.10	101.01	101.92	102.83
183...	96.99	97.90	98.82	99.73	100.65	101.56	102.48	103.39
184...	97.52	98.44	99.36	100.28	101.20	102.12	103.04	103.96
185...	98.05	98.97	99.90	100.82	101.75	102.67	103.60	104.52
186...	98.58	99.51	100.44	101.37	102.30	103.23	104.16	105.09
187...	99.11	100.04	100.98	101.91	102.85	103.78	104.72	105.65
188...	99.64	100.58	101.52	102.46	103.40	104.34	105.28	106.22
189...	100.17	101.11	102.06	103.00	103.95	104.89	105.84	106.78
190...	100.70	101.65	102.60	103.55	104.50	105.45	106.40	107.35
191...	101.23	102.18	103.14	104.09	105.05	106.00	106.96	107.91
192...	101.76	102.72	103.68	104.64	105.60	106.56	107.52	108.48
193...	102.29	103.25	104.22	105.18	106.15	107.11	108.08	109.04
194...	102.82	103.79	104.76	105.73	106.70	107.67	108.64	109.61
195...	103.35	104.32	105.30	106.27	107.25	108.22	109.20	110.17
196...	103.88	104.86	105.84	106.82	107.80	108.78	109.76	110.74
197...	104.41	105.39	106.38	107.36	108.35	109.33	110.32	111.30
198...	104.94	105.93	106.92	107.91	108.90	109.89	110.88	111.87
199...	105.47	106.46	107.46	108.45	109.45	110.44	111.44	112.43
200...	106.00	107.00	108.00	109.00	110.00	111.00	112.00	113.00

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
40....	22.80	23.00	23.20	23.40	23.60	23.80	24.00	24.20
41....	23.37	23.57	23.78	23.98	24.19	24.39	24.60	24.80
42....	23.94	24.15	24.36	24.57	24.78	24.99	25.20	25.41
43....	24.51	24.72	24.94	25.15	25.37	25.58	25.80	26.01
44....	25.08	25.30	25.52	25.74	25.96	26.18	26.40	26.62
45....	25.65	25.87	26.10	26.32	26.55	26.77	27.00	27.22
46....	26.22	26.45	26.68	26.91	27.14	27.37	27.60	27.83
47....	26.79	27.02	27.26	27.49	27.73	27.96	28.20	28.43
48....	27.36	27.60	27.84	28.08	28.32	28.56	28.80	29.04
49....	27.93	28.17	28.42	28.66	28.91	29.15	29.40	29.64
50....	28.50	28.75	29.00	29.25	29.50	29.75	30.00	30.25
51....	29.07	29.32	29.58	29.83	30.09	30.34	30.60	30.85
52....	29.64	29.90	30.16	30.42	30.68	30.94	31.20	31.46
53....	30.21	30.47	30.74	31.00	31.27	31.53	31.80	32.06
54....	30.78	31.05	31.32	31.59	31.86	32.13	32.40	32.67
55....	31.35	31.62	31.90	32.17	32.45	32.72	33.00	33.27
56....	31.92	32.20	32.48	32.76	33.04	33.32	33.60	33.88
57....	32.49	32.77	33.06	33.34	33.63	33.91	34.20	34.48
58....	33.06	33.35	33.64	33.93	34.22	34.51	34.80	35.09
59....	33.63	33.92	34.22	34.51	34.81	35.10	35.40	35.69
60....	34.20	34.50	34.80	35.10	35.40	35.70	36.00	36.30
61....	34.77	35.07	35.38	35.68	35.99	36.29	36.60	36.90
62....	35.34	35.65	35.96	36.27	36.58	36.89	37.20	37.51
63....	35.91	36.22	36.54	36.85	37.17	37.48	37.80	38.11
64....	36.48	36.80	37.12	37.44	37.76	38.08	38.40	38.72
65....	37.05	37.37	37.70	38.02	38.35	38.67	39.00	39.32
66....	37.62	37.95	38.28	38.61	38.94	39.27	39.60	39.93
67....	38.19	38.52	38.86	39.19	39.53	39.86	40.20	40.53
68....	38.76	39.10	39.44	39.78	40.12	40.46	40.80	41.14
69....	39.33	39.67	40.02	40.36	40.71	41.05	41.40	41.74
70....	39.90	40.25	40.60	40.95	41.30	41.65	42.00	42.35
71....	40.47	40.82	41.18	41.53	41.89	42.24	42.60	42.95
72....	41.04	41.40	41.76	42.12	42.48	42.84	43.20	43.56
73....	41.61	41.97	42.34	42.70	43.07	43.43	43.80	44.16
74....	42.18	42.55	42.92	43.29	43.66	44.03	44.40	44.77
75....	42.75	43.12	43.50	43.87	44.25	44.62	45.00	45.37
76....	43.32	43.70	44.08	44.46	44.84	45.22	45.60	45.98
77....	43.89	44.27	44.66	45.04	45.43	45.81	46.20	46.58
78....	44.46	44.85	45.24	45.63	46.02	46.41	46.80	47.19
79....	45.03	45.42	45.82	46.21	46.61	47.00	47.40	47.79
80....	45.60	46.00	46.40	46.80	47.20	47.60	48.00	48.40
81....	46.17	46.57	46.98	47.38	47.79	48.19	48.60	49.00
82....	46.74	47.15	47.56	47.97	48.38	48.79	49.20	49.61
83....	47.31	47.72	48.14	48.55	48.97	49.38	49.80	50.21
84....	47.88	48.30	48.72	49.14	49.56	49.98	50.40	50.82
85....	48.45	48.87	49.30	49.72	50.15	50.57	51.00	51.42

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
86...	49.02	49.45	49.88	50.31	50.74	51.17	51.60	52.03
87...	49.59	50.02	50.46	50.89	51.33	51.76	52.20	52.63
88...	50.16	50.60	51.04	51.48	51.92	52.36	52.80	53.24
89...	50.73	51.17	51.62	52.06	52.51	52.95	53.40	53.84
90...	51.30	51.75	52.20	52.65	53.10	53.55	54.00	54.45
91...	51.87	52.32	52.78	53.23	53.69	54.14	54.60	55.05
92...	52.44	52.90	53.36	53.82	54.28	54.74	55.20	55.66
93...	53.01	53.47	53.94	54.40	54.87	55.33	55.80	56.26
94...	53.58	54.05	54.52	54.99	55.46	55.93	56.40	56.87
95...	54.15	54.62	55.10	55.57	56.05	56.52	57.00	57.47
96...	54.72	55.20	55.68	56.16	56.64	57.12	57.60	58.08
97...	55.29	55.77	56.26	56.74	57.23	57.71	58.20	58.68
98...	55.86	56.35	56.84	57.33	57.82	58.31	58.80	59.29
96...	56.43	56.92	57.42	57.91	58.41	58.90	59.40	59.89
100...	57.00	57.50	58.00	58.50	59.00	59.50	60.00	60.50
101...	57.57	58.07	58.58	59.08	59.59	60.09	60.60	61.10
102...	58.14	58.65	59.16	59.67	60.18	60.69	61.20	61.71
103...	58.71	59.22	59.74	60.25	60.77	61.28	61.80	62.31
104...	59.28	59.80	60.32	60.84	61.36	61.88	62.40	62.92
105...	59.85	60.37	60.90	61.42	61.95	62.47	63.00	63.52
106...	60.42	60.95	61.48	62.01	62.54	63.07	63.60	64.13
107...	60.99	61.52	62.06	62.59	63.13	63.66	64.20	64.73
108...	61.56	62.10	62.64	63.18	63.72	64.26	64.80	65.34
109...	62.13	62.67	63.22	63.76	64.31	64.85	65.40	65.94
110...	62.70	63.25	63.80	64.35	64.90	65.45	66.00	66.55
111...	63.27	63.82	64.38	64.93	65.49	66.04	66.60	67.15
112...	63.84	64.40	64.96	65.52	66.08	66.64	67.20	67.76
113...	64.41	64.97	65.54	66.10	66.67	67.23	67.80	68.36
114...	64.98	65.55	66.12	66.69	67.26	67.83	68.40	68.97
115...	65.55	66.12	66.70	67.27	67.85	68.42	69.00	69.57
116...	66.12	66.70	67.28	67.86	68.44	69.02	69.60	70.18
117...	66.69	67.27	67.86	68.44	69.03	69.61	70.20	70.78
118...	67.26	67.85	68.44	69.03	69.62	70.21	70.80	71.39
119...	67.83	68.42	69.02	69.61	70.21	70.80	71.40	71.99
120...	68.40	69.00	69.60	70.20	70.80	71.40	72.00	72.60
121...	68.97	69.57	70.18	70.78	71.39	71.99	72.60	73.20
122...	69.54	70.15	70.76	71.37	71.98	72.59	73.20	73.81
123...	70.11	70.72	71.34	71.95	72.57	73.18	73.80	74.41
124...	70.68	71.30	71.92	72.54	73.16	73.78	74.40	75.02
125...	71.25	71.87	72.50	73.12	73.75	74.37	75.00	75.62
126...	71.82	72.45	73.08	73.71	74.34	74.97	75.60	76.23
127...	72.39	73.02	73.66	74.29	74.93	75.56	76.20	76.83
128...	72.96	73.60	74.24	74.88	75.52	76.16	76.80	77.44
129...	73.53	74.17	74.82	75.46	76.11	76.75	77.40	78.04
130...	74.10	74.75	75.40	76.05	76.70	77.35	78.00	78.65
131...	74.67	75.32	75.98	76.63	77.29	77.94	78.60	79.25

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
132...	75.24	75.90	76.56	77.22	77.88	78.54	79.20	79.86
133...	75.81	76.47	77.14	77.80	78.47	79.13	79.80	80.46
134...	76.38	77.05	77.72	78.39	79.06	79.73	80.40	81.07
135...	76.95	77.62	78.30	78.97	79.65	80.32	81.00	81.67
136...	77.52	78.20	78.88	79.56	80.24	80.92	81.60	82.28
137...	78.09	78.77	79.46	80.14	80.83	81.51	82.20	82.88
138...	78.66	79.35	80.04	80.73	81.42	82.11	82.80	83.49
139...	79.23	79.92	80.62	81.31	82.01	82.70	83.40	84.09
140...	79.80	80.50	81.20	81.90	82.60	83.30	84.00	84.70
141...	80.37	81.07	81.78	82.48	83.19	83.89	84.60	85.30
142...	80.94	81.65	82.36	83.07	83.78	84.49	85.20	85.91
143...	81.51	82.22	82.94	83.65	84.37	85.08	85.80	86.51
144...	82.08	82.80	83.52	84.24	84.96	85.68	86.40	87.12
145...	82.65	83.37	84.10	84.82	85.55	86.27	87.00	87.72
146...	83.22	83.95	84.68	85.41	86.14	86.87	87.60	88.33
147...	83.79	84.52	85.26	85.99	86.73	87.46	88.20	88.93
148...	84.36	85.10	85.84	86.58	87.32	88.06	88.80	89.54
149...	84.93	85.67	86.42	87.16	87.91	88.65	89.40	90.14
150...	85.50	86.25	87.00	87.75	88.50	89.25	90.00	90.75
151...	86.07	86.82	87.58	88.33	89.09	89.84	90.60	91.35
152...	86.64	87.40	88.16	88.92	89.68	90.44	91.20	91.96
153...	87.21	87.97	88.74	89.50	90.27	91.03	91.80	92.56
154...	87.78	88.55	89.32	90.09	90.86	91.63	92.40	93.17
155...	88.35	89.12	89.90	90.67	91.45	92.22	93.00	93.77
156...	88.92	89.70	90.48	91.26	92.04	92.82	93.60	94.38
157...	89.49	90.27	91.06	91.84	92.63	93.41	94.20	94.98
158...	90.06	90.85	91.64	92.43	93.22	94.01	94.80	95.59
159...	90.63	91.42	92.22	93.01	93.81	94.60	95.40	96.19
160...	91.20	92.00	92.80	93.60	94.40	95.20	96.00	96.80
161...	91.77	92.57	93.38	94.18	94.99	95.79	96.60	97.40
162...	92.34	93.15	93.96	94.77	95.58	96.39	97.20	98.01
163...	92.91	93.72	94.54	95.35	96.17	96.98	97.80	98.61
164...	93.48	94.30	95.12	95.94	96.76	97.58	98.40	99.22
165...	94.05	94.87	95.70	96.52	97.35	98.17	99.00	99.82
166...	94.62	95.45	96.28	97.11	97.94	98.77	99.60	100.43
167...	95.19	96.02	96.86	97.69	98.53	99.36	100.20	101.03
168...	95.76	96.60	97.44	98.28	99.12	99.96	100.80	101.64
169...	96.33	97.17	98.02	98.86	99.71	100.55	101.40	102.24
170...	96.90	97.75	98.60	99.45	100.30	101.15	102.00	102.85
171...	97.47	98.32	99.18	100.03	100.89	101.74	102.60	103.45
172...	98.04	98.90	99.76	100.62	101.48	102.34	103.20	104.06
173...	98.61	99.47	100.34	101.20	102.07	102.93	103.80	104.66
174...	99.18	100.05	100.92	101.79	102.66	103.53	104.40	105.27
175...	99.75	100.62	101.50	102.37	103.25	104.12	105.00	105.87
176...	100.32	101.20	102.08	102.96	103.84	104.72	105.60	106.48
177...	100.89	101.77	102.66	103.54	104.43	105.31	106.20	107.08

True per cent. of proof.	WINE-GALLONS.							
	57	57½	58	58½	59	59½	60	60½
178 ..	101.46	102.35	103.24	104.13	105.02	105.91	106.80	107.69
179...	102.03	102.92	103.82	104.71	105.61	106.50	107.40	108.29
180...	102.60	103.50	104.40	105.30	106.20	107.10	108.00	108.90
181...	103.17	104.07	104.98	105.88	106.79	107.69	108.60	109.50
182...	103.74	104.65	105.56	106.47	107.38	108.29	109.20	110.11
183...	104.31	105.22	106.14	107.05	107.97	108.88	109.80	110.71
184...	104.88	105.80	106.72	107.64	108.56	109.48	110.40	111.32
185...	105.45	106.37	107.30	108.22	109.15	110.07	111.00	111.92
186...	106.02	106.95	107.88	108.81	109.74	110.67	111.60	112.53
187...	106.59	107.52	108.46	109.39	110.33	111.26	112.20	113.13
188...	107.16	108.10	109.04	109.98	110.92	111.86	112.80	113.74
189...	107.73	108.67	109.62	110.56	111.51	112.45	113.40	114.34
190...	108.30	109.25	110.20	111.15	112.10	113.05	114.00	114.95
191...	108.87	109.82	110.78	111.73	112.69	113.64	114.60	115.55
192...	109.44	110.40	111.36	112.32	113.28	114.24	115.20	116.16
193...	110.01	110.97	111.94	112.90	113.87	114.83	115.80	116.76
194...	110.58	111.55	112.52	113.49	114.46	115.43	116.40	117.37
195...	111.15	112.12	113.10	114.07	115.05	116.02	117.00	117.97
196...	111.72	112.70	113.68	114.66	115.64	116.62	117.60	118.58
197...	112.29	113.27	114.26	115.24	116.23	117.21	118.20	119.18
198...	112.86	113.85	114.84	115.83	116.82	117.81	118.80	119.79
199...	113.43	114.42	115.42	116.41	117.41	118.40	119.40	120.39
200...	114.00	115.00	116.00	117.00	118.00	119.00	120.00	121.00

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
40	24.40	24.60	24.80	25.00	25.20	25.40	25.60	25.80
41	25.01	25.21	25.42	25.62	25.83	26.03	26.24	26.44
42	25.62	25.83	26.04	26.25	26.46	26.67	26.88	27.09
43	26.23	26.44	26.66	26.87	27.09	27.30	27.52	27.73
44	26.84	27.06	27.28	27.50	27.72	27.94	28.16	28.38
45	27.45	27.67	27.90	28.12	28.35	28.57	28.80	29.02
46	28.06	28.29	28.52	28.75	28.98	29.21	29.44	29.67
47	28.67	28.90	29.14	29.37	29.61	29.84	30.08	30.31
48	29.28	29.52	29.76	30.00	30.24	30.48	30.72	30.96
49	29.89	30.13	30.38	30.62	30.87	31.11	31.36	31.60
50	30.50	30.75	31.00	31.25	31.50	31.75	32.00	32.25
51	31.11	31.36	31.62	31.87	32.13	32.38	32.64	32.89
52	31.72	31.98	32.24	32.50	32.76	33.02	33.28	33.54
53	32.33	32.59	32.86	33.12	33.39	33.65	33.92	34.18
54	32.94	33.21	33.48	33.75	34.02	34.29	34.56	34.83
55	33.55	33.82	34.10	34.37	34.65	34.92	35.20	35.47
56	34.16	34.44	34.72	35.00	35.28	35.56	35.84	36.12
57	34.77	35.05	35.34	35.62	35.91	36.19	36.48	36.76
58	35.38	35.67	35.96	36.25	36.54	26.83	37.12	37.41
59	35.99	36.28	36.58	36.87	37.17	37.46	37.76	38.05
60	36.60	36.90	37.20	37.50	37.80	38.10	38.40	38.70
61	37.21	37.51	37.82	38.12	38.43	38.73	39.04	39.34
62	37.82	38.13	38.44	38.75	39.06	39.37	39.68	39.99
63	38.43	38.74	39.06	39.37	39.69	40.00	40.32	40.63
64	39.04	39.36	39.68	40.00	40.32	40.64	40.96	41.28
65	39.65	39.97	40.30	40.62	40.95	41.27	41.60	41.92
66	40.26	40.59	40.92	41.25	41.58	41.91	42.24	42.57
67	40.87	41.20	41.54	41.87	42.21	42.54	42.88	43.21
68	41.48	41.82	42.16	42.50	42.84	43.18	43.52	43.86
69	42.09	42.43	42.78	43.12	43.47	43.81	44.16	44.50
70	42.70	43.05	43.40	43.75	44.10	44.45	44.80	45.15
71	43.31	43.66	44.02	44.37	44.73	45.08	45.44	45.79
72	43.92	44.28	44.64	45.00	45.36	45.72	46.08	46.44
73	44.53	44.89	45.26	45.62	45.99	46.35	46.72	47.08
74	45.14	45.51	45.88	46.25	46.62	46.99	47.36	47.73
75	45.75	46.12	46.50	46.87	47.25	47.62	48.00	48.37
76	46.36	46.74	47.12	47.50	47.88	48.26	48.64	49.02
77	46.97	47.35	47.74	48.12	48.51	48.89	49.28	49.66
78	47.58	47.97	48.36	48.75	49.14	49.53	49.92	50.31
79	48.19	48.58	48.98	49.37	49.77	50.16	50.56	50.95
80	48.80	49.20	49.60	50.00	50.40	50.80	51.20	51.60
81	49.41	49.81	50.22	50.62	51.03	51.43	51.84	52.24
82	50.02	50.43	50.84	51.25	51.66	52.07	52.48	52.89
83	50.63	51.04	51.46	51.87	52.29	52.70	53.12	53.53
84	51.24	51.66	52.08	52.50	52.92	53.34	53.76	54.18
85	51.85	52.27	52.70	53.12	53.55	53.97	54.40	54.82

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
86...	52.46	52.89	53.32	53.75	54.18	54.61	55.04	55.47
87...	53.07	53.50	53.94	54.37	54.81	55.24	55.68	56.11
88...	53.68	54.12	54.56	55.00	55.44	55.88	56.32	56.76
89...	54.29	54.73	55.18	55.62	56.07	56.51	56.96	57.40
90...	54.90	55.35	55.80	56.25	56.70	57.15	57.60	58.05
91...	55.51	55.96	56.42	56.87	57.33	57.78	58.24	58.69
92...	56.12	56.58	57.04	57.50	57.96	58.42	58.88	59.34
93...	56.73	57.19	57.66	58.12	58.59	59.05	59.52	59.98
94...	57.34	57.81	58.28	58.75	59.22	59.69	60.16	60.63
95...	57.95	58.42	58.90	59.37	59.85	60.32	60.80	61.27
96...	58.56	59.04	59.52	60.00	60.48	60.96	61.44	61.92
97...	59.17	59.65	60.14	60.62	61.11	61.59	62.08	62.56
98...	59.78	60.27	60.76	61.25	61.74	62.23	62.72	63.21
99...	60.39	60.88	61.38	61.87	62.37	62.86	63.36	63.85
100...	61.00	61.50	62.00	62.50	63.00	63.50	64.00	64.50
101...	61.61	62.11	62.62	63.12	63.63	64.13	64.64	65.14
102...	62.22	62.73	63.24	63.75	64.26	64.77	65.28	65.79
103...	62.83	63.34	63.86	64.37	64.89	65.40	65.92	66.43
104...	63.44	63.96	64.48	65.00	65.52	66.04	66.56	67.08
105...	64.05	64.57	65.10	65.62	66.15	66.67	67.20	67.72
106...	64.66	65.19	65.72	66.25	66.78	67.31	67.84	68.37
107...	65.27	65.80	66.34	66.87	67.41	67.94	68.48	69.01
108...	65.88	66.42	66.96	67.50	68.04	68.58	69.12	69.66
109...	66.49	67.03	67.58	68.12	68.67	69.21	69.76	70.30
110...	67.10	67.65	68.20	68.75	69.30	69.85	70.40	70.95
111...	67.71	68.26	68.82	69.37	69.93	70.48	71.04	71.59
112...	68.32	68.88	69.44	70.00	70.56	71.12	71.68	72.24
113...	68.93	69.49	70.06	70.62	71.19	71.75	72.32	72.88
114...	69.54	70.11	70.68	71.25	71.82	72.39	72.96	73.53
115...	70.15	70.72	71.30	71.87	72.45	73.02	73.60	74.17
116...	70.76	71.34	71.92	72.50	73.08	73.66	74.24	74.82
117...	71.37	71.95	72.54	73.12	73.71	74.29	74.88	75.46
118...	71.98	72.57	73.16	73.75	74.34	74.93	75.52	76.11
119...	72.59	73.18	73.78	74.37	74.97	75.56	76.16	76.75
120...	73.20	73.80	74.40	75.00	75.60	76.20	76.80	77.40
121...	73.81	74.41	75.02	75.62	76.23	76.83	77.44	78.04
122...	74.42	75.03	75.64	76.25	76.86	77.47	78.08	78.69
123...	75.03	75.64	76.26	76.87	77.49	78.10	78.72	79.33
124...	75.64	76.26	76.88	77.50	78.12	78.74	79.36	79.98
125...	76.25	76.87	77.50	78.12	78.75	79.37	80.00	80.62
126...	76.86	77.49	78.12	78.75	79.38	80.01	80.64	81.27
127...	77.47	78.10	78.74	79.37	80.01	80.64	81.28	81.91
128...	78.08	78.72	79.36	80.00	80.64	81.28	81.92	82.56
129...	78.69	79.33	79.98	80.62	81.27	81.91	82.56	83.20
130...	79.30	79.95	80.60	81.25	81.90	82.55	83.20	83.85
131...	79.91	80.56	81.22	81.87	82.53	83.18	83.84	84.49

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
132...	80.52	81.18	81.84	82.50	83.16	83.82	84.48	85.14
133...	81.13	81.79	82.46	83.12	83.79	84.45	85.12	85.78
134...	81.74	82.41	83.08	83.75	84.42	85.09	85.76	86.43
135...	82.35	83.02	83.70	84.37	85.05	85.72	86.40	87.07
136...	82.96	83.64	84.32	85.00	85.68	86.36	87.04	87.72
137...	83.57	84.25	84.94	85.62	86.31	86.99	87.68	88.36
138...	84.18	84.87	85.56	86.25	86.94	87.63	88.32	89.01
139...	84.79	85.48	86.18	86.87	87.57	88.26	88.96	89.65
140...	85.40	86.10	86.80	87.50	88.20	88.90	89.60	90.30
141...	86.01	86.71	87.42	88.12	88.83	89.53	90.24	90.94
142...	86.62	87.33	88.04	88.75	89.46	90.17	90.88	91.59
143...	87.23	87.94	88.66	89.37	90.09	90.80	91.52	92.23
144...	87.84	88.56	89.28	90.00	90.72	91.44	92.16	92.88
145...	88.45	89.17	89.90	90.62	91.35	92.07	92.80	93.52
146...	89.06	89.79	90.52	91.25	91.98	92.71	93.44	94.17
147...	89.67	90.40	91.14	91.87	92.61	93.34	94.08	94.81
148...	90.28	91.02	91.76	92.50	93.24	93.98	94.72	95.46
149...	90.89	91.63	92.38	93.12	93.87	94.61	95.36	96.10
150...	91.50	92.25	93.00	93.75	94.50	95.25	96.00	96.75
151...	92.11	92.86	93.62	94.37	95.13	95.88	96.64	97.39
152...	92.72	93.48	94.24	95.00	95.76	96.52	97.28	98.04
153...	93.33	94.09	94.86	95.62	96.39	97.15	97.92	98.68
154...	93.94	94.71	95.48	96.25	97.02	97.79	98.56	99.33
155...	94.55	95.32	96.10	96.87	97.65	98.42	99.20	99.97
156...	95.16	95.94	96.72	97.50	98.28	99.06	99.84	100.62
157...	95.77	96.55	97.34	98.12	98.91	99.69	100.48	101.26
158...	96.38	97.17	97.96	98.75	99.54	100.33	101.12	101.91
159...	96.99	97.78	98.58	99.37	100.17	100.96	101.76	102.55
160...	97.60	98.40	99.20	100.00	100.80	101.60	102.40	103.20
161...	98.21	99.01	99.82	100.62	101.43	102.23	103.04	103.84
162...	98.82	99.63	100.44	101.25	102.06	102.87	103.68	104.49
163...	99.43	100.24	101.06	101.87	102.69	103.50	104.32	105.13
164...	100.04	100.86	101.68	102.50	103.32	104.14	104.96	105.78
165...	100.65	101.47	102.30	103.12	103.95	104.77	105.60	106.42
166...	101.26	102.09	102.92	103.75	104.58	105.41	106.24	107.07
167...	101.87	102.70	103.54	104.37	105.21	106.04	106.88	107.71
168...	102.48	103.32	104.16	105.00	105.84	106.68	107.52	108.36
169...	103.09	103.93	104.78	105.62	106.47	107.31	108.16	109.00
170...	103.70	104.55	105.40	106.25	107.10	107.95	108.80	109.65
171...	104.31	105.16	106.02	106.87	107.73	108.58	109.44	110.29
172...	104.92	105.78	106.64	107.50	108.36	109.22	110.08	110.94
173...	105.53	106.39	107.26	108.12	108.99	109.85	110.72	111.58
174...	106.14	107.01	107.88	108.75	109.62	110.49	111.36	112.23
175...	106.75	107.62	108.50	109.37	110.25	111.12	112.00	112.87
176...	107.36	108.24	109.12	110.00	110.88	111.76	112.64	113.52
177...	107.97	108.85	109.74	110.62	111.51	112.39	113.28	114.16

True per cent. of proof.	WINE-GALLONS.							
	61	61½	62	62½	63	63½	64	64½
178...	108.58	109.47	110.36	111.25	112.14	113.03	113.92	114.81
179...	109.19	110.08	110.98	111.87	112.77	113.66	114.56	115.45
180...	109.80	110.70	111.60	112.50	113.40	114.30	115.20	116.10
181...	110.41	111.31	112.22	113.12	114.03	114.93	115.84	116.74
182...	111.02	111.93	112.84	113.75	114.66	115.57	116.48	117.39
183...	111.63	112.54	113.46	114.37	115.29	116.20	117.12	118.03
184...	112.24	113.16	114.08	115.00	115.92	116.84	117.76	118.68
185...	112.85	113.77	114.70	115.62	116.55	117.47	118.40	119.33
186...	113.46	114.39	115.32	116.25	117.18	118.11	119.04	119.97
187...	114.07	115.00	115.94	116.87	117.81	118.74	119.68	120.61
188...	114.68	115.62	116.56	117.50	118.44	119.38	120.32	121.26
189...	115.29	116.23	117.18	118.12	119.07	120.01	120.96	121.90
190...	115.90	116.85	117.80	118.75	119.70	120.65	121.60	122.55
191...	116.51	117.46	118.42	119.37	120.33	121.28	122.24	123.19
192...	117.12	118.08	119.04	120.00	120.96	121.92	122.88	123.84
193...	117.73	118.69	119.66	120.62	121.59	122.55	123.52	124.48
194...	118.34	119.31	120.28	121.25	122.22	123.19	124.16	125.13
195...	118.95	119.92	120.90	121.87	122.85	123.82	124.80	125.77
196...	119 56	120.54	121.52	122.50	123.48	124.46	125.44	126.42
197...	120.17	121.15	122.14	123.12	124.11	125.09	126.08	127.06
198...	120.78	121.77	122.76	123.75	124.74	125.73	126.72	127.71
199...	121.39	122.38	123.38	124.37	125.37	126.36	127.36	128.35
200...	122.00	123.00	124.00	125.00	126.00	127.00	128.00	129.00

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
40	26.00	26.20	26.40	26.60	26.80	27.00	27.20	27.40
41	26.65	26.85	27.06	27.26	27.47	27.67	27.88	28.08
42	27.30	27.51	27.72	27.93	28.14	28.35	28.56	28.77
43	27.95	28.16	28.38	28.59	28.81	29.02	29.24	29.45
44	28.60	28.82	29.04	29.26	29.48	29.70	29.92	30.14
45	29.25	29.47	29.70	29.92	30.15	30.37	30.60	30.82
46	29.90	30.13	30.36	30.59	30.82	31.05	31.28	31.51
47	30.55	30.78	31.02	31.25	31.49	31.72	31.96	32.19
48	31.20	31.44	31.68	31.92	32.16	32.40	32.64	32.88
49	31.85	32.09	32.34	32.58	32.83	33.07	33.32	33.56
50	32.50	32.75	33.00	33.25	33.50	33.75	34.00	34.25
51	33.15	33.40	33.66	33.91	34.17	34.42	34.68	34.93
52	33.80	34.06	34.32	34.58	34.84	35.10	35.36	35.62
53	34.45	34.71	34.98	35.24	35.51	35.77	36.04	36.30
54	35.10	35.37	35.64	35.91	36.18	36.45	36.72	36.99
55	35.75	36.02	36.30	36.57	36.85	37.12	37.40	37.67
56	36.40	36.68	36.96	37.24	37.52	37.80	38.08	38.36
57	37.05	37.33	37.62	37.90	38.19	38.47	38.76	39.04
58	37.70	37.99	38.28	38.57	38.86	39.15	39.44	39.73
59	38.35	38.64	38.94	39.23	39.53	39.82	40.12	40.41
60	39.00	39.30	39.60	39.90	40.20	40.50	40.80	41.10
61	39.65	39.95	40.26	40.56	40.87	41.17	41.48	41.78
62	40.30	40.61	40.92	41.23	41.54	41.85	42.16	42.47
63	40.95	41.26	41.58	41.89	42.21	42.52	42.84	43.15
64	41.60	41.92	42.24	42.56	42.88	43.20	43.52	43.84
65	42.25	42.57	42.90	43.22	43.55	43.87	44.20	44.52
66	42.90	43.23	43.56	43.89	44.22	44.55	44.88	45.21
67	43.55	43.88	44.22	44.55	44.89	45.22	45.56	45.89
68	44.20	44.54	44.88	45.22	45.56	45.90	46.24	46.58
69	44.85	45.19	45.54	45.88	46.23	46.57	46.92	47.26
70	45.50	45.85	46.20	46.55	46.90	47.25	47.60	47.95
71	46.15	46.50	46.86	47.21	47.57	47.92	48.28	48.63
72	46.80	47.16	47.52	47.88	48.24	48.60	48.96	49.32
73	47.45	47.81	48.18	48.54	48.91	49.27	49.64	50.00
74	48.10	48.47	48.84	49.21	49.58	49.95	50.32	50.69
75	48.75	49.12	49.50	49.87	50.25	50.62	51.00	51.37
76	49.40	49.78	50.16	50.54	50.92	51.30	51.68	52.06
77	50.05	50.43	50.82	51.20	51.59	51.97	52.36	52.74
78	50.70	51.09	51.48	51.87	52.26	52.65	53.04	53.43
79	51.35	51.74	52.14	52.53	52.93	53.32	53.72	54.11
80	52.00	52.40	52.80	53.20	53.60	54.00	54.40	54.80
81	52.65	53.05	53.46	53.86	54.27	54.67	55.08	55.48
82	53.30	53.71	54.12	54.53	54.94	55.35	55.76	56.17
83	53.95	54.36	54.78	55.19	55.61	56.02	56.44	56.85
84	54.60	55.02	55.44	55.86	56.28	56.70	57.12	57.54
85	55.25	55.67	56.10	56.52	56.95	57.37	57.80	58.22

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
86...	55.90	56.33	56.76	57.19	57.62	58.05	58.48	58.91
87...	56.55	56.98	57.42	57.85	58.29	58.72	59.16	59.59
88...	57.20	57.64	58.08	58.52	58.96	59.40	59.84	60.28
89...	57.85	58.29	58.74	59.18	59.63	60.07	60.52	60.96
90...	58.50	58.95	59.40	59.85	60.30	60.75	61.20	61.65
91...	59.15	59.60	60.06	60.51	60.97	61.42	61.88	62.33
92...	59.80	60.26	60.72	61.18	61.64	62.10	62.56	63.02
93...	60.45	60.91	61.38	61.84	62.31	62.77	63.24	63.70
94...	61.10	61.57	62.04	62.51	62.98	63.45	63.92	64.39
95...	61.75	62.22	62.70	63.17	63.65	64.12	64.60	65.07
96...	62.40	62.88	63.36	63.84	64.32	64.80	65.28	65.76
97...	63.05	63.53	64.02	64.50	64.99	65.47	65.96	66.44
98...	63.70	64.19	64.68	65.17	65.66	66.15	66.64	67.13
99...	64.35	64.84	65.34	65.83	66.33	66.82	67.32	67.81
100...	65.00	65.50	66.00	66.50	67.00	67.50	68.00	68.50
101...	65.65	66.15	66.66	67.16	67.67	68.17	68.68	69.18
102...	66.30	66.81	67.32	67.83	68.34	68.85	69.36	69.87
103...	66.95	67.46	67.98	68.49	69.01	69.52	70.04	70.55
104...	67.60	68.12	68.64	69.16	69.68	70.20	70.72	71.24
105...	68.25	68.77	69.30	69.82	70.35	70.87	71.40	71.92
106...	68.90	69.43	69.96	70.49	71.02	71.55	72.08	72.61
107...	69.55	70.08	70.62	71.15	71.69	72.22	72.76	73.29
108...	70.20	70.74	71.28	71.82	72.36	72.90	73.44	73.98
109...	70.85	71.39	71.94	72.48	73.03	73.57	74.12	74.66
110...	71.50	72.05	72.60	73.15	73.70	74.25	74.80	75.35
111...	72.15	72.70	73.26	73.81	74.37	74.92	75.48	76.03
112...	72.80	73.36	73.92	74.48	75.04	75.60	76.16	76.72
113...	73.45	74.01	74.58	75.14	75.71	76.27	76.84	77.40
114...	74.10	74.67	75.24	75.81	76.38	76.95	77.52	78.09
115...	74.75	75.32	75.90	76.47	77.05	77.62	78.20	78.77
116...	75.40	75.98	76.56	77.14	77.72	78.30	78.88	79.46
117...	76.05	76.63	77.22	77.80	78.39	78.97	79.56	80.14
118...	76.70	77.29	77.88	78.47	79.06	79.65	80.24	80.83
119...	77.35	77.94	78.54	79.13	79.73	80.32	80.92	81.51
120...	78.00	78.60	79.20	79.80	80.40	81.00	81.60	82.20
121...	78.65	79.25	79.86	80.46	81.07	81.67	82.28	82.88
122...	79.30	79.91	80.52	81.13	81.74	82.35	82.96	83.57
123...	79.95	80.56	81.18	81.79	82.41	83.02	83.64	84.25
124...	80.60	81.22	81.84	82.46	83.08	83.70	84.32	84.94
125...	81.25	81.87	82.50	83.12	83.75	84.37	85.00	85.62
126...	81.90	82.53	83.16	83.79	84.42	85.05	85.68	86.31
127...	82.55	83.18	83.82	84.45	85.09	85.72	86.36	86.99
128...	83.20	83.84	84.48	85.12	85.76	86.40	87.04	87.68
129...	83.85	84.49	85.14	85.78	86.43	87.07	87.72	88.36
130...	84.50	85.15	85.80	86.45	87.10	87.75	88.40	89.05
131...	85.15	85.80	86.46	87.11	87.77	88.42	89.08	89.73

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
132...	85.80	86.46	87.12	87.78	88.44	89.10	89.76	90.42
133...	86.45	87.11	87.78	88.44	89.11	89.77	90.44	91.10
134...	87.10	87.77	88.44	89.11	89.78	90.45	91.12	91.79
135...	87.75	88.42	89.10	89.77	90.45	91.12	91.80	92.47
136...	88.40	89.08	89.76	90.44	91.12	91.80	92.48	93.16
137...	89.05	89.73	90.42	91.10	91.79	92.47	93.16	93.84
138...	89.70	90.39	91.08	91.77	92.46	93.15	93.84	94.53
139...	90.35	91.04	91.74	92.43	93.13	93.82	94.52	95.21
140...	91.00	91.70	92.40	93.10	93.80	94.50	95.20	95.90
141...	91.65	92.35	93.06	93.76	94.47	95.17	95.88	96.58
142...	92.30	93.01	93.72	94.43	95.14	95.85	96.56	97.27
143...	92.95	93.66	94.38	95.09	95.81	96.52	97.24	97.95
144...	93.60	94.32	95.04	95.76	96.48	97.20	97.92	98.64
145...	94.25	94.97	95.70	96.42	97.15	97.87	98.60	99.32
146...	94.90	95.63	96.36	97.09	97.82	98.55	99.28	100.01
147...	95.55	96.28	97.02	97.75	98.49	99.22	99.96	100.69
148...	96.20	96.94	97.68	98.42	99.16	99.90	100.64	101.38
149...	96.85	97.59	98.34	99.08	99.83	100.57	101.32	102.06
150...	97.50	98.25	99.00	99.75	100.50	101.25	102.00	102.75
151...	98.15	98.90	99.66	100.41	101.17	101.92	102.68	103.43
152...	98.80	99.56	100.32	101.08	101.84	102.60	103.36	104.12
153...	99.45	100.21	100.98	101.74	102.51	103.27	104.04	104.80
154...	100.10	100.87	101.64	102.41	103.18	103.95	104.72	105.49
155...	100.75	101.52	102.30	103.07	103.85	104.62	105.40	106.17
156...	101.40	102.18	102.96	103.74	104.52	105.30	106.08	106.86
157...	102.05	102.83	103.62	104.40	105.19	105.97	106.76	107.54
158...	102.70	103.49	104.28	105.07	105.86	106.65	107.44	108.23
159...	103.35	104.14	104.94	105.73	106.53	107.32	108.12	108.91
160...	104.00	104.80	105.60	106.40	107.20	108.00	108.80	109.60
161...	104.65	105.45	106.26	107.06	107.87	108.67	109.48	110.28
162...	105.30	106.11	106.92	107.73	108.54	109.35	110.16	110.97
163...	105.95	106.76	107.58	108.39	109.21	110.02	110.84	111.65
164...	106.60	107.42	108.24	109.06	109.88	110.70	111.52	112.34
165...	107.25	108.07	108.90	109.72	110.55	111.37	112.20	113.02
166...	107.90	108.73	109.56	110.39	111.22	112.05	112.88	113.71
167...	108.55	109.38	110.22	111.05	111.89	112.72	113.56	114.39
168...	109.20	110.04	110.88	111.72	112.56	113.40	114.24	115.08
169...	109.85	110.69	111.54	112.38	113.23	114.07	114.92	115.76
170...	110.50	111.35	112.20	113.05	113.90	114.75	115.60	116.45
171...	111.15	112.00	112.86	113.71	114.57	115.42	116.28	117.13
172...	111.80	112.66	113.52	114.38	115.24	116.10	116.96	117.82
173...	112.45	113.31	114.18	115.04	115.91	116.77	117.64	118.50
174...	113.10	113.97	114.84	115.71	116.58	117.45	118.32	119.19
175...	113.75	114.62	115.50	116.37	117.25	118.12	119.00	119.87
176...	114.40	115.28	116.16	117.04	117.92	118.80	119.68	120.56
177...	115.05	115.93	116.82	117.70	118.59	119.47	120.36	121.24

True per cent. of proof.	WINE-GALLONS.							
	65	65½	66	66½	67	67½	68	68½
178...	115.70	116.59	117.48	118.37	119.26	120.15	121.04	121.93
179...	116.35	117.24	118.14	119.03	119.93	120.82	121.72	122.61
180...	117.00	117.90	118.80	119.70	120.60	121.50	122.40	123.30
181...	117.65	118.55	119.46	120.36	121.27	122.17	123.08	123.98
182...	118.30	119.21	120.12	121.03	121.94	122.85	123.76	124.67
183...	118.95	119.86	120.78	121.69	122.61	123.52	124.44	125.35
184...	119.60	120.52	121.44	122.36	123.28	124.20	125.12	126.04
185...	120.25	121.17	122.10	123.02	123.95	124.87	125.80	126.72
186...	120.90	121.83	122.76	123.69	124.62	125.55	126.48	127.41
187...	121.55	122.48	123.42	124.35	125.29	126.22	127.16	128.09
188...	122.20	123.14	124.08	125.02	125.96	126.90	127.84	128.78
189...	122.85	123.79	124.74	125.68	126.63	127.57	128.52	129.46
190...	123.50	124.45	125.40	126.35	127.30	128.25	129.20	130.15
191...	124.15	125.10	126.06	127.01	127.97	128.92	129.88	130.83
192...	124.80	125.76	126.72	127.68	128.64	129.60	130.56	131.52
193...	125.45	126.41	127.38	128.34	129.31	130.27	131.24	132.20
194...	126.10	127.07	128.04	129.01	129.98	130.95	131.92	132.89
195...	126.75	127.72	128.70	129.67	130.65	131.62	132.60	133.57
196...	127.40	128.38	129.36	130.34	131.32	132.30	133.28	134.26
197...	128.05	129.03	130.02	131.00	131.99	132.97	133.96	134.94
198...	128.70	129.69	130.68	131.67	132.66	133.65	134.64	135.63
199...	129.35	130.34	131.34	132.33	133.33	134.32	135.32	136.31
200...	130.00	131.00	132.00	133.00	134.00	135.00	136.00	137.00

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
40....	27.60	27.80	28.00	28.20	28.40	28.60	28.80	29.00
41....	28.29	28.49	28.70	28.90	29.11	29.31	29.52	29.72
42....	28.98	29.19	29.40	29.61	29.82	30.03	30.24	30.45
43....	29.67	29.88	30.10	30.31	30.53	30.74	30.96	31.17
44....	30.36	30.58	30.80	31.02	31.24	31.46	31.68	31.90
45....	31.05	31.27	31.50	31.72	31.95	32.17	32.40	32.62
46....	31.74	31.97	32.20	32.43	32.66	32.89	33.12	33.35
47....	32.43	32.66	32.90	33.13	33.37	33.60	33.84	34.07
48....	33.12	33.36	33.60	33.84	34.08	34.32	34.56	34.80
49....	33.81	34.05	34.30	34.54	34.79	35.03	35.28	35.52
50....	34.50	34.75	35.00	35.25	35.50	35.75	36.00	36.25
51....	35.19	35.44	35.70	35.95	36.21	36.46	36.72	36.97
52....	35.88	36.14	36.40	36.66	36.92	37.18	37.44	37.70
53....	36.57	36.83	37.10	37.36	37.63	37.89	38.16	38.42
54....	37.26	37.53	37.80	38.07	38.34	38.61	38.88	39.15
55....	37.95	38.22	38.50	38.77	39.05	39.32	39.60	39.87
56....	38.64	38.92	39.20	39.48	39.76	40.04	40.32	40.60
57....	39.33	39.61	39.90	40.18	40.47	40.75	41.04	41.32
58....	40.02	40.31	40.60	40.89	41.18	41.47	41.76	42.05
59....	40.71	41.00	41.30	41.59	41.89	42.18	42.48	42.77
60....	41.40	41.70	42.00	42.30	42.60	42.90	43.20	43.50
61....	42.09	42.39	42.70	43.00	43.31	43.61	43.92	44.22
62....	42.78	43.09	43.40	43.71	44.02	44.33	44.64	44.95
63....	43.47	43.78	44.10	44.41	44.73	45.04	45.36	45.67
64....	44.16	44.48	44.80	45.12	45.44	45.76	46.08	46.40
65....	44.85	45.17	45.50	45.82	46.15	46.47	46.80	47.12
66....	45.54	45.87	46.20	46.53	46.86	47.19	47.52	47.85
67....	46.23	46.56	46.90	47.23	47.57	47.90	48.24	48.57
68....	46.92	47.26	47.60	47.94	48.28	48.62	48.96	49.30
69....	47.61	47.95	48.30	48.64	48.99	49.33	49.68	50.02
70....	48.30	48.65	49.00	49.35	49.70	50.05	50.40	50.75
71....	48.99	49.34	49.70	50.05	50.41	50.76	51.12	51.47
72....	49.68	50.04	50.40	50.76	51.12	51.48	51.84	52.20
73....	50.37	50.73	51.10	51.46	51.83	52.19	52.56	52.92
74....	51.06	51.43	51.80	52.17	52.54	52.91	53.28	53.65
75....	51.75	52.12	52.50	52.87	53.25	53.62	54.00	54.37
76....	52.44	52.82	53.20	53.58	53.96	54.34	54.72	55.10
77....	53.13	53.51	53.90	54.28	54.67	55.05	55.44	55.82
78....	53.82	54.21	54.60	54.99	55.38	55.77	56.16	56.55
79....	54.51	54.90	55.30	55.69	56.09	56.48	56.88	57.27
80....	55.20	55.60	56.00	56.40	56.80	57.20	57.60	58.00
81....	55.89	56.29	56.70	57.10	57.51	57.91	58.32	58.72
82....	56.58	56.99	57.40	57.81	58.22	58.63	59.04	59.45
83....	57.27	57.68	58.10	58.51	58.93	59.34	59.76	60.17
84....	57.96	58.38	58.80	59.22	59.64	60.06	60.48	60.90
85....	58.65	59.07	59.50	59.92	60.35	60.77	61.20	61.62

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
86...	59.34	59.77	60.20	60.63	61.06	61.49	61.92	62.35
87...	60.03	60.46	60.90	61.33	61.77	62.20	62.64	63.07
88...	60.72	61.16	61.60	62.04	62 48	62.92	63.36	63.80
89...	61.41	61.85	62.30	62.74	63.19	63.63	64.08	64.52
90...	62.10	62.55	63.00	63.45	63.90	64.35	64.80	65.25
91...	62.79	63.24	63.70	64.15	64.61	65.06	65.52	65.97
92...	63.48	63.94	64.40	64.86	65.32	65.78	66.24	66.70
93...	64.17	64.63	65.10	65.56	66.03	66.49	66.96	67.42
94...	64.86	65.33	65.80	66.27	66.74	67.21	67.68	68.15
95...	65.55	66.02	66.50	66.97	67.45	67.92	68.40	68.87
96...	66.24	66.72	67.20	67.68	68.16	68.64	69.12	69.60
97...	66.93	67.41	67.90	68.38	68.87	69.35	69.84	70.32
98...	67.62	68.11	68.60	69.09	69.58	70.07	70.56	71.05
99...	68.31	68.80	69.30	69.79	70.29	70.78	71.28	71.77
100...	69.00	69.50	70.00	70.50	71.00	71.50	72.00	72.50
101...	69.69	70.19	70.70	71.20	71.71	72.21	72.72	73.22
102...	70.38	70.89	71.40	71.91	72.42	72.93	73.44	73.95
103...	71.07	71.58	72.10	72.61	73.13	73.64	74.16	74.67
104...	71.76	72.28	72.80	73.32	73.84	74.36	74.88	75.40
105...	72.45	72.97	73.50	74.02	74.55	75.07	75.60	76.12
106...	73.14	73.67	74.20	74.73	75.26	75.79	76.32	76.85
107...	73.83	74.36	74.90	75.43	75.97	76.50	77.04	77.57
108...	74.52	75.06	75.60	76.14	76.68	77.22	77.76	78.30
109...	75.21	75.75	76.30	76.84	77.39	77.93	78.48	79.02
110...	75.90	76.45	77.00	77.55	78.10	78.65	79.20	79.75
111...	76.59	77.14	77.70	78.25	78.81	79.36	79.92	80.47
112...	77.28	77.84	78.40	78.96	79.52	80.08	80.64	81.20
113...	77.97	78.53	79.10	79.66	80.23	80.79	81.36	81.92
114...	78.66	79.23	79.80	80.37	80.94	81.51	82.08	82.65
115...	79.35	79.92	80.50	81.07	81.65	82.22	82.80	83.37
116...	80.04	80.62	81.20	81.78	82.36	82.94	83.52	84.10
117...	80.73	81.31	81.90	82.48	83.07	83.65	84.24	84.82
118...	81.42	82.01	82.60	83.19	83.78	84.37	84.96	85.55
119...	82.11	82.70	83.30	83.89	84.49	85.08	85.68	86.27
120...	82.80	83.40	84.00	84.60	85.20	85.80	86.40	87.00
121...	83.49	84.09	84.70	85.30	85.91	86.51	87.12	87.72
122...	84.18	84.79	85.40	86.01	86.62	87.23	87.84	88.45
123...	84.87	85.48	86.10	86.71	87.33	87.94	88.56	89.17
124...	85.56	86.18	86.80	87.42	88.04	88.66	89.28	89.90
125...	86.25	86.87	87.50	88.12	88.75	89.37	90.00	90.62
126...	86.94	87.57	88.20	88.83	89.46	90.09	90.72	91.35
127...	87.63	88.26	88.90	89.53	90.17	90.80	91.44	92.07
128...	88.32	88.96	89.60	90.24	90.88	91.52	92.16	92.80
129...	89.01	89.65	90.30	90.94	91.59	92.23	92.88	93.52
130...	89.70	90.35	91.00	91.65	92.30	92.95	93.60	94.25
131...	90.39	91.04	91.70	92.35	93.01	93.66	94.32	94.97

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
132...	91.08	91.74	92.40	93.06	93.72	94.38	95.04	95.70
133...	91.77	92.43	93.10	93.76	94.43	95.09	95.76	96.42
134...	92.46	93.13	93.80	94.47	95.14	95.81	96.48	97.15
135...	93.15	93.82	94.50	95.17	95.85	96.52	97.20	97.87
136...	93.84	94.52	95.20	95.88	96.56	97.24	97.92	98.60
137...	94.53	95.21	95.90	96.58	97.27	97.95	98.64	99.32
138...	95.22	95.91	96.60	97.29	97.98	98.67	99.36	100.05
139...	95.91	96.60	97.30	97.99	98.69	99.38	100.08	100.77
140...	96.60	97.30	98.00	98.70	99.40	100.10	100.80	101.50
141 ..	97.29	97.99	98.70	99.40	100.11	100.81	101.52	102.22
142...	97.98	98.69	99.40	100.11	100.82	101.53	102.24	102.95
143...	98.67	99.38	100.10	100.81	101.53	102.24	102.96	103.67
144...	99.36	100.08	100.80	101.52	102.24	102.96	103.68	104.40
145...	100.05	100.77	101.50	102.22	102.95	103.67	104.40	105.12
146...	100.74	101.47	102.20	102.93	103.66	104.39	105.12	105.85
147...	101.43	102.16	102.90	103.63	104.37	105.10	105.84	106.57
148...	102.12	102.86	103.60	104.34	105.08	105.82	106.56	107.30
149...	102.81	103.55	104.30	105.04	105.79	106.53	107.28	108.02
150...	103.50	104.25	105.00	105.75	106.50	107.25	108.00	108.75
151...	104.19	104.94	105.70	106.45	107.21	107.96	108.72	109.47
152...	104.88	105.64	106.40	107.16	107.92	108.68	109.44	110.20
153...	105.57	106.33	107.10	107.86	108.63	109.39	110.16	110.92
154...	106.26	107.03	107.80	108.57	109.34	110.11	110.88	111.65
155...	106.95	107.72	108.50	109.27	110.05	110.82	111.60	112.37
156...	107.64	108.42	109.20	109.98	110.76	111.54	112.32	113.10
157...	108.33	109.11	109.90	110.68	111.47	112.25	113.04	113.82
158...	109.02	109.81	110.60	111.39	112.18	112.97	113.76	114.55
159...	109.71	110.50	111.30	112.09	112.89	113.68	114.48	115.27
160...	110.40	111.20	112.00	112.80	113.60	114.40	115.20	116.00
161...	111.09	111.89	112.70	113.50	114.31	115.11	115.92	116.72
162...	111.78	112.59	113.40	114.21	115.02	115.83	116.64	117.45
163...	112.47	113.28	114.10	114.91	115.73	116.54	117.36	118.17
164...	113.16	113.98	114.80	115.62	116.44	117.26	118.08	118.90
165...	113.85	114.67	115.50	116.32	117.15	117.97	118.80	119.62
166...	114.54	115.37	116.20	117.03	117.86	118.69	119.52	120.35
167...	115.23	116.06	116.90	117.73	118.57	119.40	120.24	121.07
168...	115.92	116.76	117.60	118.44	119.28	120.12	120.96	121.80
169...	116.61	117.45	118.30	119.14	119.99	120.83	121.68	122.52
170...	117.30	118.15	119.00	119.85	120.70	121.55	122.40	123.25
171...	117.99	118.84	119.70	120.55	121.41	122.26	123.12	123.97
172...	118.68	119.54	120.40	121.26	122.12	122.98	123 84	124.70
173...	119.37	120.23	121.10	121.96	122.83	123.69	124.56	125.42
174...	120.06	120.93	121.80	122.67	123.54	124.41	125.28	126.15
175...	120.75	121.62	122.50	123.37	124.25	125.12	126 00	126.87
176...	121.44	122.32	123.20	124.08	124.96	125.84	126.72	127.60
177...	122.13	123.01	123.90	124.78	125.67	126.55	127.44	128.32

True per cent. of proof.	WINE-GALLONS.							
	69	69½	70	70½	71	71½	72	72½
178...	122.82	123.71	124.60	125.49	126.38	127.27	128.16	129.05
179...	123.51	124.40	125.30	126.19	127.09	127.98	128.88	129.77
180...	124.20	125.10	126.00	126.90	127.80	128.70	129.60	130.50
181...	124.89	125.79	126.70	127.60	128.51	129.41	130.32	131.22
182...	125.58	126.49	127.40	128.31	129.22	130.13	131.04	131.95
183...	126.27	127.18	128.10	129.01	129.93	130.84	131.76	132.67
184...	126.96	127.88	128.80	129.72	130.64	131.56	132.48	133.40
185...	127.65	128.57	129.50	130.42	131.35	132.27	133.20	134.12
186...	128.34	129.27	130.20	131.13	132.06	132.99	133.92	134.85
187...	129.03	129.96	130.90	131.83	132.77	133.70	134.64	135.57
188...	129.72	130.66	131.60	132.54	133.48	134.42	135.36	136.30
189...	130.41	131.35	132.30	133.24	134.19	135.13	136.08	137.02
190...	131.10	132.05	133.00	133.95	134.90	135.85	136.80	137.75
191...	131.79	132.74	133.70	134.65	135.61	136.56	137.52	138.47
192...	132.48	133.44	134.40	135.36	136.32	137.28	138.24	139.20
193...	133.17	134.13	135.10	136.06	137.03	137.99	138.96	139.92
194...	133.86	134.83	135.80	136.77	137.74	138.71	139.68	140.65
195...	134.55	135.52	136.50	137.47	138.45	139.42	140.40	141.37
196...	135.24	136.22	137.20	138.18	139.16	140.14	141.12	142.10
197...	135.93	136.91	137.90	138.88	139.87	140.85	141.84	142.82
198...	136.62	137.61	138.60	139.59	140.58	141.57	142.56	143.55
199...	137.31	138.30	139.30	140.29	141.29	142.28	143.28	144.27
200...	138.00	139.00	140.00	141.00	142.00	143.00	144.00	145.00

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
40....	29.20	29.40	29.60	29.80	30.00	30.20	30.40	30.60
41....	29.93	30.13	30.34	30.54	30.75	30.95	31.16	31.36
42....	30.66	30.87	31.08	31.29	31.50	31.71	31.92	32.13
43....	31.39	31.60	31.82	32.03	32.25	32.46	32.68	32.89
44....	32.12	32.34	32.56	32.78	33.00	33.22	33.44	33.66
45....	32.85	33.07	33.30	33.52	33.75	33.97	34.20	34.42
46....	33.58	33.81	34.04	34.27	34.50	34.73	34.96	35.19
47....	34.31	34.54	34.78	35.01	35.25	35.48	35.72	35.95
48....	35.04	35.28	35.52	35.76	36.00	36.24	36.48	36.72
49....	35.77	36.01	36.26	36.50	36.75	36.99	37.24	37.48
50....	36.50	36.75	37.00	37.25	37.50	37.75	38.00	38.25
51....	37.23	37.48	37.74	37.99	38.25	38.50	38.76	39.01
52....	37.96	38.22	38.48	38.74	39.00	39.26	39.52	39.78
53....	38.69	38.95	39.22	39.48	39.75	40.01	40.28	40.54
54....	39.42	39.69	39.96	40.23	40.50	40.77	41.04	41.31
55....	40.15	40.42	40.70	40.97	41.25	41.52	41.80	42.07
56....	40.88	41.16	41.44	41.72	42.00	42.28	42.56	42.84
57....	41.61	41.89	42.18	42.46	42.75	43.03	43.32	43.60
58....	42.34	42.63	42.92	43.21	43.50	43.79	44.08	44.37
59....	43.07	43.36	43.66	43.95	44.25	44.54	44.84	45.13
60....	43.80	44.10	44.40	44.70	45.00	45.30	45.60	45.90
61....	44.53	44.83	45.14	45.44	45.75	46.05	46.36	46.66
62....	45.26	45.57	45.88	46.19	46.50	46.81	47.12	47.43
63....	45.99	46.30	46.62	46.93	47.25	47.56	47.88	48.19
64....	46.72	47.04	47.36	47.68	48.00	48.32	48.64	48.96
65....	47.45	47.77	48.10	48.42	48.75	49.07	49.40	49.72
66....	48.18	48.51	48.84	49.17	49.50	49.83	50.16	50.49
67....	48.91	49.24	49.58	49.91	50.25	50.58	50.92	51.25
68....	49.64	49.98	50.32	50.66	51.00	51.34	51.68	52.02
69....	50.37	50.71	51.06	51.40	51.75	52.09	52.44	52.78
70....	51.10	51.45	51.80	52.15	52.50	52.85	53.20	53.55
71....	51.83	52.18	52.54	52.89	53.25	53.60	53.96	54.31
72....	52.56	52.92	53.28	53.64	54.00	54.36	54.72	55.08
73....	53.29	53.65	54.02	54.38	54.75	55.11	55.48	55.84
74....	54.02	54.39	54.76	55.13	55.50	55.87	56.24	56.61
75....	54.75	55.12	55.50	55.87	56.25	56.62	57.00	57.37
76....	55.48	55.86	56.24	56.62	57.00	57.38	57.76	58.14
77....	56.21	56.59	56.98	57.36	57.75	58.13	58.52	58.90
78....	56.94	57.33	57.72	58.11	58.50	58.89	59.28	59.67
79....	57.67	58.06	58.46	58.85	59.25	59.64	60.04	60.43
80....	58.40	58.80	59.20	59.60	60.00	60.40	60.80	61.20
81....	59.13	59.53	59.94	60.34	60.75	61.15	61.56	61.96
82....	59.86	60.27	60.68	61.09	61.50	61.91	62.32	62.73
83....	60.59	61.00	61.42	61.83	62.25	62.66	63.08	63.49
84....	61.32	61.74	62.16	62.58	63.00	63.42	63.84	64.26
85....	62.05	62.47	62.90	63.32	63.75	64.17	64.60	65.02

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
86...	62.78	63.21	63.64	64.07	64.50	64.93	65.36	65.79
87...	63.51	63.94	64.38	64.81	65.25	65.68	66.12	66.55
88...	64.24	64.68	65.12	65.56	66.00	66.44	66.88	67.32
89...	64.97	65.41	65.86	66.30	66.75	67.19	67.64	68.08
90...	65.70	66.15	66.60	67.05	67.50	67.95	68.40	68.85
91...	66.43	66.88	67.34	67.79	68.25	68.70	69.16	69.61
92...	67.16	67.62	68.08	68.54	69.00	69.46	69.92	70.38
93...	67.89	68.35	68.82	69.28	69.75	70.21	70.68	71.14
94...	68.62	69.09	69.56	70.03	70.50	70.97	71.44	71.91
95...	69.35	69.82	70.30	70.77	71.25	71.72	72.20	72.67
96...	70.08	70.56	71.04	71.52	72.00	72.48	72.96	73.44
97...	70.81	71.29	71.78	72.26	72.75	73.23	73.72	74.20
98...	71.54	72.03	72.52	73.01	73.50	73.99	74.48	74.97
99...	72.27	72.76	73.26	73.75	74.25	74.74	75.24	75.73
100...	73.00	73.50	74.00	74.50	75.00	75.50	76.00	76.50
101...	73.73	74.23	74.74	75.24	75.75	76.25	76.76	77.26
102...	74.46	74.97	75.48	75.99	76.50	77.01	77.52	78.03
103...	75.19	75.70	76.22	76.73	77.25	77.76	78.28	78.79
104...	75.92	76.44	76.96	77.48	78.00	78.52	79.04	79.56
105...	76.65	77.17	77.70	78.22	78.75	79.27	79.80	80.32
106...	77.38	77.91	78.44	78.97	79.50	80.03	80.56	81.09
107...	78.11	78.64	79.18	79.71	80.25	80.78	81.32	81.85
108...	78.84	79.38	79.92	80.46	81.00	81.54	82.08	82.62
109...	79.57	80.11	80.66	81.20	81.75	82.29	82.84	83.38
110...	80.30	80.85	81.40	81.95	82.50	83.05	83.60	84.15
111...	81.03	81.58	82.14	82.69	83.25	83.80	84.36	84.91
112...	81.76	82.32	82.88	83.44	84.00	84.56	85.12	85.68
113...	82.49	83.05	83.62	84.18	84.75	85.31	85.88	86.44
114...	83.22	83.79	84.36	84.93	85.50	86.07	86.64	87.21
115...	83.95	84.52	85.10	85.67	86.25	86.82	87.40	87.97
116...	84.68	85.26	85.84	86.42	87.00	87.58	88.16	88.74
117...	85.41	85.99	86.58	87.16	87.75	88.33	88.92	89.50
118...	86.14	86.73	87.32	87.91	88.50	89.09	89.68	90.27
119...	86.87	87.46	88.06	88.65	89.25	89.84	90.44	91.03
120...	87.60	88.20	88.80	89.40	90.00	90.60	91.20	91.80
121...	88.33	88.93	89.54	90.14	90.75	91.35	91.96	92.56
122...	89.06	89.67	90.28	90.89	91.50	92.11	92.72	93.33
123...	89.79	90.40	91.02	91.63	92.25	92.86	93.48	94.09
124...	90.52	91.14	91.76	92.38	93.00	93.62	94.24	94.86
125...	91.25	91.87	92.50	93.12	93.75	94.37	95.00	95.62
126...	91.98	92.61	93.24	93.87	94.50	95.13	95.76	96.39
127...	92.71	93.34	93.98	94.61	95.25	95.88	96.52	97.15
128...	93.44	94.08	94.72	95.36	96.00	96.64	97.28	97.92
129...	94.17	94.81	95.46	96.10	96.75	97.39	98.04	98.68
130...	94.90	95.55	96.20	96.85	97.50	98.15	98.80	99.45
131...	95.63	96.28	96.94	97.59	98.25	98.90	99.56	100.21

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
132...	96.36	97.02	97.68	98.34	99.00	99.66	100.32	100.98
133...	97.09	97.75	98.42	99.08	99.75	100.41	101.08	101.74
134...	97.82	98.49	99.16	99.83	100.50	101.17	101.84	102.51
135...	98.55	99.22	99.90	100.57	101.25	101.92	102.60	103.27
136...	99.28	99.96	100.64	101.32	102.00	102.68	103.36	104.04
137...	100.01	100.69	101.38	102.06	102.75	103.43	104.12	104.80
138...	100.74	101.43	102.12	102.81	103.50	104.19	104.88	105.57
139...	101.47	102.16	102.86	103.55	104.25	104.94	105.64	106.33
140...	102.20	102.90	103.60	104.30	105.00	105.70	106.40	107.10
141...	102.93	103.63	104.34	105.04	105.75	106.45	107.16	107.86
142...	103.66	104.37	105.08	105.79	106.50	107.21	107.92	108.63
143...	104.39	105.10	105.82	106.53	107.25	107.96	108.68	109.39
144...	105.12	105.84	106.56	107.28	108.00	108.72	109.44	110.16
145...	105.85	106.57	107.30	108.02	108.75	109.47	110.20	110.92
146...	106.58	107.31	108.04	108.77	109.50	110.23	110.96	111.69
147...	107.31	108.04	108.78	109.51	110.25	110.98	111.72	112.45
148...	108.04	108.78	109.52	110.26	111.00	111.74	112.48	113.22
149...	108.77	109.51	110.26	111.00	111.75	112.49	113.24	113.98
150...	109.50	110.25	111.00	111.75	112.50	113.25	114.00	114.75
151...	110.23	110.98	111.74	112.49	113.25	114.00	114.76	115.51
152...	110.96	111.72	112.48	113.24	114.00	114.76	115.52	116.28
153...	111.69	112.45	113.22	113.98	114.75	115.51	116.28	117.04
154...	112.42	113.19	113.96	114.73	115.50	116.27	117.04	117.81
155...	113.15	113.92	114.70	115.47	116.25	117.02	117.80	118.57
156...	113.88	114.66	115.44	116.22	117.00	117.78	118.56	119.34
157...	114.61	115.39	116.18	116.96	117.75	118.53	119.32	120.10
158...	115.34	116.13	116.92	117.71	118.50	119.29	120.08	120.87
159...	116.07	116.86	117.66	118.45	119.25	120.04	120.84	121.63
160...	116.80	117.60	118.40	119.20	120.00	120.80	121.60	122.40
161...	117.53	118.33	119.14	119.94	120.75	121.55	122.36	123.16
162...	118.26	119.07	119.88	120.69	121.50	122.31	123.12	123.93
163...	118.99	119.80	120.62	121.43	122.25	123.06	123.88	124.69
164...	119.72	120.54	121.36	122.18	123.00	123.82	124.64	125.46
165...	120.45	121.27	122.10	122.92	123.75	124.57	125.40	126.22
166...	121.18	122.01	122.84	123.67	124.50	125.33	126.16	126.99
167...	121.91	122.74	123.58	124.41	125.25	126.08	126.92	127.75
168...	122.64	123.48	124.32	125.16	126.00	126.84	127.68	128.52
169...	123.37	124.21	125.06	125.90	126.75	127.59	128.44	129.28
170...	124.10	124.95	125.80	126.65	127.50	128.35	129.20	130.05
171...	124.83	125.68	126.54	127.39	128.25	129.10	129.96	130.81
172...	125.56	126.42	127.28	128.14	129.00	129.86	130.72	131.58
173...	126.29	127.15	128.02	128.88	129.75	130.61	131.48	132.34
174...	127.02	127.89	128.76	129.63	130.50	131.37	132.24	133.11
175...	127.75	128.62	129.50	130.37	131.25	132.12	133.00	133.87
176...	128.48	129.36	130.24	131.12	132.00	132.88	133.76	134.64
177...	129.21	130.09	130.98	131.86	132.75	133.63	134.52	135.40

True per cent. of proof.	WINE-GALLONS.							
	73	73½	74	74½	75	75½	76	76½
178...	129.94	130.83	131.72	132.61	133.50	134.39	135.28	136.17
179...	130.67	131.56	132.46	133.35	134.25	135.14	136.04	136.93
180...	131.40	132.30	133.20	134.10	135.00	135.90	136.80	137.70
181...	132.13	133.03	133.94	134.84	135.75	136.65	137.56	138.46
182...	132.86	133.77	134.68	135.59	136.50	137.41	138.32	139.23
183...	133.59	134.50	135.42	136.33	137.25	138.16	139.08	139.99
184...	134.32	135.24	136.16	137.08	138.00	138.92	139.84	140.76
185...	135.05	135.97	136.90	137.82	138.75	139.67	140.60	141.52
186...	135.78	136.71	137.64	138.57	139.50	140.43	141.36	142.29
187...	136.51	137.44	138.38	139.31	140.25	141.18	142.12	143.05
188...	137.24	138.18	139.12	140.06	141.00	141.94	142.88	143.82
189...	137.97	138.91	139.86	140.80	141.75	142.69	143.64	144.58
190...	138.70	139.65	140.60	141.55	142.50	143.45	144.40	145.35
191...	139.43	140.38	141.34	142.29	143.25	144.20	145.16	146.11
192...	140.16	141.12	142.08	143.04	144.00	144.96	145.92	146.88
193...	140.89	141.85	142.82	143.78	144.75	145.71	146.68	147.64
194...	141.62	142.59	143.56	144.53	145.50	146.47	147.44	148.41
195...	142.35	143.32	144.30	145.27	146.25	147.22	148.20	149.17
196...	143.08	144.06	145.04	146.02	147.00	147.98	148.96	149.94
197...	143.81	144.79	145.78	146.76	147.75	148.73	149.72	150.70
198...	144.54	145.53	146.52	147.51	148.50	149.49	150.48	151.47
199...	145.27	146.26	147.26	148.25	149.25	150.24	151.24	152.23
200...	146.00	147.00	148.00	149.00	150.00	151.00	152.00	153.00

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
40....	30.80	31.00	31.20	31.40	31.60	31.80	32.00	32.20
41....	34.57	31.77	31.98	32.18	32.39	32.59	32.80	33.00
42....	32.34	32.55	32.76	32.97	33.18	33.39	33.60	33.81
43....	33.11	33.32	33.54	33.75	33.97	34.18	34.40	34.61
44....	33.88	34.10	34.32	34.54	34.76	34.98	35.20	35.42
45....	34.65	34.87	35.10	35.32	35.55	35.77	36.00	36.22
46....	35.42	35.65	35.88	36.11	36.34	36.57	36.80	37.03
47....	36.19	36.42	36.66	36.89	37.13	37.36	37.60	37.83
48....	36.96	37.20	37.44	37.68	37.92	38.16	38.40	38.64
49....	37.73	37.97	38.22	38.46	38.71	38.95	39.20	39.44
50....	38.50	38.75	39.00	39.25	39.50	39.75	40.00	40.25
51....	39.27	39.52	39.78	40.03	40.29	40.54	40.80	41.05
52....	40.04	40.30	40.56	40.82	41.08	41.34	41.60	41.86
53....	40.81	41.07	41.34	41.60	41.87	42.13	42.40	42.66
54....	41.58	41.85	42.12	42.39	42.66	42.93	43.20	43.47
55....	42.35	42.62	42.90	43.17	43.45	43.72	44.00	44.27
56....	43.12	43.40	43.68	43.96	44.24	44.52	44.80	45.08
57....	43.89	44.17	44.46	44.74	45.03	45.31	45.60	45.88
58....	44.66	44.95	45.24	45.53	45.82	46.11	46.40	46.69
59....	45.43	45.72	46.02	46.31	46.61	46.90	47.20	47.49
60....	46.20	46.50	46.80	47.10	47.40	47.70	48.00	48.30
61....	46.97	47.27	47.58	47.88	48.19	48.49	48.80	49.10
62....	47.74	48.05	48.36	48.67	48.98	49.29	49.60	49.91
63....	48.51	48.82	49.14	49.45	49.77	50.08	50.40	50.71
64....	49.28	49.60	49.92	50.24	50.56	50.88	51.20	51.52
65....	50.05	50.37	50.70	51.02	51.35	51.67	52.00	52.32
66....	50.82	51.15	51.48	51.81	52.14	52.47	52.80	53.13
67....	51.59	51.92	52.26	52.59	52.93	53.26	53.60	53.93
68....	52.36	52.70	53.04	53.38	53.72	54.06	54.40	54.74
69....	53.13	53.47	53.82	54.16	54.51	54.85	55.20	55.54
70....	53.90	54.25	54.60	54.95	55.30	55.65	56.00	56.35
71....	54.67	55.02	55.38	55.73	56.09	56.44	56.80	57.15
72....	55.44	55.80	56.16	56.52	56.88	57.24	57.60	57.96
73....	56.21	56.57	56.94	57.30	57.67	58.03	58.40	58.76
74....	56.98	57.35	57.72	58.09	58.46	58.83	59.20	59.57
75....	57.75	58.12	58.50	58.87	59.25	59.62	60.00	60.37
76....	58.52	58.90	59.28	59.66	60.04	60.42	60.80	61.18
77....	59.29	59.67	60.06	60.44	60.83	61.21	61.60	61.98
78....	60.06	60.45	60.84	61.23	61.62	62.01	62.40	62.79
79....	60.83	61.22	61.62	62.01	62.41	62.80	63.20	63.59
80....	61.60	62.00	62.40	62.80	63.20	63.60	64.00	64.40
81....	62.37	62.77	63.18	63.58	63.99	64.39	64.80	65.20
82....	63.14	63.55	63.96	64.37	64.78	65.19	65.60	66.01
83....	63.91	64.32	64.74	65.15	65.57	65.98	66.40	66.81
84....	64.68	65.10	65.52	65.94	66.36	66.78	67.20	67.62
85....	65.45	65.87	66.30	66.72	67.15	67.57	68.00	68.42

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
86...	66.22	66.65	67.08	67.51	67.94	68.37	68.80	69.23
87...	66.99	67.42	67.86	68.29	68.73	69.16	69.60	70.03
88...	67.76	68.20	68.64	69.08	69.52	69.96	70.40	70.84
89...	68.53	68.97	69.42	69.86	70.31	70.75	71.20	71.64
90...	69.30	69.75	70.20	70.65	71.10	71.55	72.00	72.45
91...	70.07	70.52	70.98	71.43	71.89	72.34	72.80	73.25
92...	70.84	71.30	71.76	72.22	72.68	73.14	73.60	74.06
93...	71.61	72.07	72.54	73.00	73.47	73.93	74.40	74.86
94...	72.38	72.85	73.32	73.79	74.26	74.73	75.20	75.67
95...	73.15	73.62	74.10	74.57	75.05	75.52	76.00	76.47
96...	73.92	74.40	74.88	75.36	75.84	76.32	76.80	77.28
97...	74.69	75.17	75.66	76.14	76.63	77.11	77.60	78.08
98...	75.46	75.95	76.44	76.93	77.42	77.91	78.40	78.89
99...	76.23	76.72	77.22	77.71	78.21	78.70	79.20	79.69
100...	77.00	77.50	78.00	78.50	79.00	79.50	80.00	80.50
101...	77.77	78.27	78.78	79.28	79.79	80.29	80.80	81.30
102...	78.54	79.05	79.56	80.07	80.58	81.09	81.60	82.11
103...	79.31	79.82	80.34	80.85	81.37	81.88	82.40	82.91
104...	80.08	80.60	81.12	81.64	82.16	82.68	83.20	83.72
105...	80.85	81.37	81.90	82.42	82.95	83.47	84.00	84.52
106...	81.62	82.15	82.68	83.21	83.74	84.27	84.80	85.33
107 ..	82.39	82.92	83.46	83.99	84.53	85.06	85.60	86.13
108...	83.16	83.70	84.24	84.78	85.32	85.86	86.40	86.94
109...	83.93	84.47	85.02	85.56	86.11	86.65	87.20	87.74
110...	84.70	85.25	85.80	86.35	86.90	87.45	88.00	88.55
111...	85.47	86.02	86.58	87.13	87.69	88.24	88.80	89.35
112...	86.24	86.80	87.36	87.92	88.48	89.04	89.60	90.16
113...	87.01	87.57	88.14	88.70	89.27	89.83	90.40	90.96
114...	87.78	88.35	88.92	89.49	90.06	90.63	91.20	91.77
115...	88.55	89.12	89.70	90.27	90.85	91.42	92.00	92.57
116...	89.32	89.90	90.48	91.06	91.64	92.22	92.80	93.38
117...	90.09	90.67	91.26	91.84	92.43	93.01	93.60	94.18
118...	90.86	91.45	92.04	92.63	93.22	93.81	94.40	94.99
119...	91.63	92.22	92.82	93.41	94.01	94.60	95.20	95.79
120...	92.40	93.00	93.60	94.20	94.80	95.40	96.00	96.60
121...	93.17	93.77	94.38	94.98	95.59	96.19	96.80	97.40
122...	93.94	94.55	95.16	95.77	96.38	96.99	97.60	98.21
123...	94.71	95.32	95.94	96.55	97.17	97.78	98.40	99.01
124...	95.48	96.10	96.72	97.34	97.96	98.58	99.20	99.82
125...	96.25	96.87	97.50	98.12	98.75	99.37	100.00	100.62
126...	97.02	97.65	98.28	98.91	99.54	100.17	100.80	101.43
127...	97.79	98.42	99.06	99.69	100.33	100.96	101.60	102.23
128...	98.56	99.20	99.84	100.48	101.12	101.76	102.40	103.04
129...	99.33	99.97	100.62	101.26	101.91	102.55	103.20	103.84
130...	100.10	100.75	101.40	102.05	102.70	103.35	104.00	104.65
131...	100.87	101.52	102.18	102.83	103.49	104.14	104.80	105.45

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
132...	101.64	102.30	102.96	103.62	104.28	104.94	105.60	106.26
133...	102.41	103.07	103.74	104.40	105.07	105.73	106.40	107.06
134...	103.18	103.85	104.52	105.19	105.86	106.53	107.20	107.87
135...	103.95	104.62	105.30	105.97	106.65	107.32	108.00	108.67
136...	104.72	105.40	106.08	106.76	107.44	108.12	108.80	109.48
137...	105.49	106.17	106.86	107.54	108.23	108.91	109.60	110.28
138...	106.26	106.95	107.64	108.33	109.02	109.71	110.40	111.09
139...	107.03	107.72	108.42	109.11	109.81	110.50	111.20	111.89
140...	107.80	108.50	109.20	109.90	110.60	111.30	112.00	112.70
141...	108.57	109.27	109.98	110.68	111.39	112.09	112.80	113.50
142...	109.34	110.05	110.76	111.47	112.18	112.89	113.60	114.31
143...	110.11	110.82	111.54	112.25	112.97	113.68	114.40	115.11
144...	110.88	111.60	112.32	113.04	113.76	114.48	115.20	115.92
145...	111.65	112.37	113.10	113.82	114.55	115.27	116.00	116.72
146...	112.42	113.15	113.88	114.61	115.34	116.07	116.80	117.53
147...	113.19	113.92	114.66	115.39	116.13	116.86	117.60	118.33
148...	113.96	114.70	115.44	116.18	116.92	117.66	118.40	119.14
149...	114.73	115.47	116.22	116.96	117.71	118.45	119.20	119.94
150...	115.50	116.25	117.00	117.75	118.50	119.25	120.00	120.75
151...	116.27	117.02	117.78	118.53	119.29	120.04	120.80	121.55
152...	117.04	117.80	118.56	119.32	120.08	120.84	121.60	122.36
153...	117.81	118.57	119.34	120.10	120.87	121.63	122.40	123.16
154...	118.58	119.35	120.12	120.89	121.66	122.43	123.20	123.97
155...	119.35	120.12	120.90	121.67	122.45	123.22	124.00	124.77
156...	120.12	120.90	121.68	122.46	123.24	124.02	124.80	125.58
157...	120.89	121.67	122.46	123.24	124.03	124.81	125.60	126.38
158...	121.66	122.45	123.24	124.03	124.82	125.61	126.40	127.19
159...	122.43	123.22	124.02	124.81	125.61	126.40	127.20	127.99
160...	123.20	124.00	124.80	125.60	126.40	127.20	128.00	128.80
161...	123.97	124.77	125.58	126.38	127.19	127.99	128.80	129.60
162...	124.74	125.55	126.36	127.17	127.98	128.79	129.60	130.41
163...	125.51	126.32	127.14	127.95	128.77	129.58	130.40	131.21
164...	126.28	127.10	127.92	128.74	129.56	130.38	131.20	132.02
165...	127.05	127.87	128.70	129.52	130.35	131.17	132.00	132.82
166...	127.82	128.65	129.48	130.31	131.14	131.97	132.80	133.63
167...	128.59	129.42	130.26	131.09	131.93	132.76	133.60	134.43
168...	129.36	130.20	131.04	131.88	132.72	133.56	134.40	135.24
169...	130.13	130.97	131.82	132.66	133.51	134.35	135.20	136.04
170...	130.90	131.75	132.60	133.45	134.30	135.15	136.00	136.85
171...	131.67	132.52	133.38	134.23	135.09	135.94	136.80	147.65
172...	132.44	133.30	134.16	135.02	135.88	136.74	137.60	138.46
173...	133.21	134.07	134.94	135.80	136.67	137.53	138.40	139.26
174...	133.98	134.85	135.72	136.59	137.46	138.33	139.20	140.07
175...	134.75	135.62	136.50	137.37	138.25	139.12	140.00	140.87
176...	135.52	136.40	137.28	138.16	139.04	139.92	140.80	141.68
177...	136.29	137.17	138.06	138.94	139.83	140.71	141.60	142.48

True per cent. of proof.	WINE-GALLONS.							
	77	77½	78	78½	79	79½	80	80½
178...	137.06	137.95	138.84	139.73	140.62	141.51	142.40	143.29
179...	137.83	138.72	139.62	140.51	141.41	142.30	143.20	144.09
180...	138.60	139.50	140.40	141.30	142.20	143.10	144.00	144.90
181...	139.37	140.27	141.18	142.08	142.99	143.89	144.80	145.70
182...	140.14	141.05	141.96	142.87	143.78	144.69	145.60	146.51
183...	140.91	141.82	142.74	143.65	144.57	145.48	146.40	147.31
184...	141.68	142.60	143.52	144.44	145.36	146.28	147.20	148.12
185...	142.45	143.37	144.30	145.22	146.15	147.07	148.00	148.92
186...	143.22	144.15	145.08	146.01	146.94	147.87	148.80	149.73
187...	143.99	144.92	145.86	146.79	147.73	148.66	149.60	150.53
188...	144.76	145.70	146.64	147.58	148.52	149.46	150.40	151.34
189...	145.53	146.47	147.42	148.36	149.31	150.25	151.20	152.14
190...	146.30	147.25	148.20	149.15	150.10	151.05	152.00	152.95
191...	147.07	148.02	148.98	149.93	150.89	151.84	152.80	153.75
192...	147.84	148.80	149.76	150.72	151.68	152.64	153.60	154.56
193...	148.61	149.57	150.54	151.50	152.47	153.43	154.40	155.36
194...	149.38	150.35	151.32	152.29	153.26	154.23	155.20	156.17
195...	150.15	151.12	152.10	153.07	154.05	155.02	156.00	156.97
196...	150.92	151.90	152.88	153.86	154.84	155.82	156.80	157.78
197...	151.69	152.67	153.66	154.64	155.63	156.61	157.60	158.58
198...	152.46	153.45	154.44	155.43	156.42	157.41	158.40	159.39
199...	153.23	154.22	155.22	156.21	157.21	158.20	159.20	160.19
200...	154.00	155.00	156.00	157.00	158.00	159.00	160.00	161.00

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
40....	32.40	32.60	32.80	33.00	33.20	33.40	33.60	33.80
41....	33.21	33.41	33.62	33.82	34.03	34.23	34.44	34.64
42....	34.02	34.23	34.44	34.65	34.86	35.07	35.28	35.49
43....	34.83	35.04	35.26	35.47	35.69	35.90	36.12	36.33
44....	35.64	35.86	36.08	36.30	36.52	36.74	36.96	37.18
45....	36.45	36.67	36.90	37.12	37.35	37.57	37.80	38.02
46....	37.26	37.49	37.72	37.95	38.18	38.41	38.64	38.87
47....	38.07	38.30	38.54	38.77	39.01	39.24	39.48	39.71
48....	38.88	39.12	39.36	39.60	39.84	40.08	40.32	40.56
49....	39.69	39.93	40.18	40.42	40.67	40.91	41.16	41.40
50....	40.50	40.75	41.00	41.25	41.50	41.75	42.00	42.25
51....	41.31	41.56	41.82	42.07	42.33	42.58	42.84	43.09
52....	42.12	42.38	42.64	42.90	43.16	43.42	43.68	43.94
53....	42.93	43.19	43.46	43.72	43.99	44.25	44.52	44.78
54....	43.74	44.01	44.28	44.55	44.82	45.09	45.36	45.63
55....	44.55	44.82	45.10	45.37	45.65	45.92	46.20	46.47
56....	45.36	45.64	45.92	46.20	46.48	46.76	47.04	47.32
57....	46.17	46.45	46.74	47.02	47.31	47.59	47.88	48.16
58....	46.98	47.27	47.56	47.85	48.14	48.43	48.72	49.01
59....	47.79	48.08	48.38	48.67	48.97	49.26	49.56	49.85
60....	48.60	48.90	49.20	49.50	49.80	50.10	50.40	50.70
61....	49.41	49.71	50.02	50.32	50.63	50.93	51.24	51.54
62....	50.22	50.53	50.84	51.15	51.46	51.77	52.08	52.39
63....	51.03	51.34	51.66	51.97	52.29	52.60	52.92	53.23
64....	51.84	52.16	52.48	52.80	53.12	53.44	53.76	54.08
65....	52.65	52.97	53.30	53.62	53.95	54.27	54.60	54.92
66....	53.46	53.79	54.12	54.45	54.78	55.11	55.44	55.77
67....	54.27	54.60	54.94	55.27	55.61	55.95	56.28	56.61
68....	55.08	55.42	55.76	56.10	56.44	56.78	57.12	57.46
69....	55.89	56.23	56.58	56.92	57.27	57.61	57.96	58.30
70....	56.70	57.05	57.40	57.75	58.10	58.45	58.80	59.15
71....	57.51	57.86	58.22	58.57	58.93	59.28	59.64	59.99
72....	58.32	58.68	59.04	59.40	59.76	60.12	60.48	60.84
73....	59.13	59.49	59.86	60.22	60.59	60.95	61.32	61.68
74....	59.94	60.31	60.68	61.05	61.42	61.79	62.16	62.53
75....	60.75	61.12	61.50	61.87	62.25	62.62	63.00	63.37
76....	61.56	61.94	62.32	62.70	63.08	63.46	63.84	64.22
77....	62.37	62.75	63.14	63.52	63.91	64.29	64.68	65.06
78....	63.18	63.57	63.96	64.35	64.74	65.13	65.52	65.91
79....	63.99	64.38	64.78	65.17	65.57	65.96	66.36	66.75
80....	64.80	65.20	65.60	66.00	66.40	66.80	67.20	67.60
81....	65.61	66.01	66.42	66.82	67.23	67.63	68.04	68.44
82....	66.42	66.83	67.24	67.65	68.06	68.47	68.88	69.29
83....	67.23	67.64	68.06	68.47	68.89	69.30	69.72	70.13
84....	68.04	68.46	68.88	69.30	69.72	70.14	70.56	70.98
85....	68.85	69.27	69.70	70.12	70.55	70.97	71.40	71.82

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
86...	69.66	70.09	70.52	70.95	71.38	71.81	72.24	72.67
87...	70.47	70.90	71.34	71.77	72.21	72.64	73.08	73.51
88...	71.28	71.72	72.16	72.60	73.04	73.48	73.92	74.36
89...	72.09	72.53	72.98	73.42	73.87	74.31	74.76	75.20
90...	72.90	73.35	73.80	74.25	74.70	75.15	75.60	76.05
91...	73.71	74.16	74.62	75.07	75.53	75.98	76.44	76.89
92...	74.52	74.98	75.44	75.90	76.36	76.82	77.28	77.74
93...	75.33	75.79	76.26	76.72	77.19	77.65	78.12	78.58
94...	76.14	76.61	77.08	77.55	78.02	78.49	78.96	79.43
95...	76.95	77.42	77.90	78.37	78.85	79.32	79.80	80.27
96...	77.76	78.24	78.72	79.20	79.68	80.16	80.64	81.12
97...	78.57	79.05	79.54	80.02	80.51	80.99	81.48	81.96
98...	79.38	79.87	80.36	80.85	81.34	81.83	82.32	82.81
99...	80.19	80.68	81.18	81.67	82.17	82.66	83.16	83.65
100...	81.00	81.50	82.00	82.50	83.00	83.50	84.00	84.50
101...	81.81	82.31	82.82	83.32	83.83	84.33	84.84	85.34
102...	82.62	83.13	83.64	84.15	84.66	85.17	85.68	86.19
103...	83.43	83.94	84.46	84.97	85.49	86.00	86.52	87.03
104...	84.24	84.76	85.28	85.80	86.32	86.84	87.36	87.88
105...	85.05	85.57	86.10	86.62	87.15	87.67	88.20	88.72
106...	85.86	86.39	86.92	87.45	87.98	88.51	89.04	89.57
107...	86.67	87.20	87.74	88.27	88.81	89.34	89.88	90.41
108...	87.48	88.02	88.56	89.10	89.64	90.18	90.72	91.26
109...	88.29	88.83	89.38	89.92	90.47	91.01	91.56	92.10
110...	89.10	89.65	90.20	90.75	91.30	91.85	92.40	92.95
111...	89.91	90.46	91.02	91.57	92.13	92.68	93.24	93.79
112...	90.72	91.28	91.84	92.40	92.96	93.52	94.08	94.64
113...	91.53	92.09	92.66	93.22	93.79	94.35	94.92	95.48
114...	92.34	92.91	93.48	94.05	94.62	95.19	95.76	96.33
115...	93.15	93.72	94.30	94.87	95.45	96.02	96.60	97.17
116...	93.96	94.54	95.12	95.70	96.28	96.86	97.44	98.02
117...	94.77	95.35	95.94	96.52	97.11	97.69	98.28	98.86
118...	95.58	96.17	96.76	97.35	97.94	98.53	99.12	99.71
119...	96.39	96.98	97.58	98.17	98.77	99.36	99.96	100.55
120...	97.20	97.80	98.40	99.00	99.60	100.20	100.80	101.40
121...	98.01	98.61	99.22	99.82	100.43	101.03	101.64	102.24
122...	98.82	99.43	100.04	100.65	101.26	101.87	102.48	103.09
123...	99.63	100.24	100.86	101.47	102.09	102.70	103.32	103.93
124...	100.44	101.06	101.68	102.30	102.92	103.54	104.16	104.78
125...	101.25	101.87	102.50	103.12	103.75	104.37	105.00	105.62
126...	102.06	102.69	103.32	103.95	104.58	105.21	105.84	106.47
127...	102.87	103.50	104.14	104.77	105.41	106.04	106.68	107.31
128...	103.68	104.32	104.96	105.60	106.24	106.88	107.52	108.16
129...	104.49	105.13	105.78	106.42	107.07	107.71	108.36	109.00
130...	105.30	105.95	106.60	107.25	107.90	108.55	109.20	109.85
131...	106.11	106.76	107.42	108.07	108.73	109.38	110.04	110.69

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
132...	106.92	107.58	108.24	108.90	109.56	110.22	110.88	111.54
133...	107.73	108.39	109.06	109.72	110.39	111.05	111.72	112.38
134...	108.54	109.21	109.88	110.55	111.22	111.89	112.56	113.23
135...	109.35	110.02	110.70	111.37	112.05	112.72	113.40	114.07
136...	110.16	110.84	111.52	112.20	112.88	113.56	114.24	114.92
137...	110.97	111.65	112.34	113.02	113.71	114.39	115.08	115.76
138...	111.78	112.47	113.16	113.85	114.54	115.23	115.92	116.61
139...	112.59	113.28	113.98	114.67	115.37	116.06	116.76	117.45
140...	113.40	114.10	114.80	115.50	116.20	116.90	117.60	118.30
141...	114.21	114.91	115.62	116.32	117.03	117.73	118.44	119.14
142...	115.02	115.73	116.44	117.15	117.86	118.57	119.28	119.99
143...	115.83	116.54	117.26	117.97	118.69	119.40	120.12	120.83
144...	116.64	117.36	118.08	118.80	119.52	120.24	120.96	121.68
145...	117.45	118.17	118.90	119.62	120.35	121.07	121.80	122.52
146...	118.26	118.99	119.72	120.45	121.18	121.91	122.64	123.37
147...	119.07	119.80	120.54	121.27	122.01	122.74	123.48	124.21
148...	119.88	120.62	121.36	122.10	122.84	123.58	124.32	125.06
149...	120.69	121.43	122.18	122.92	123.67	124.41	125.16	125.90
150...	121.50	122.25	123.00	123.75	124.50	125.25	126.00	126.75
151...	122.31	123.06	123.82	124.57	125.33	126.08	126.84	127.59
152...	123.12	123.88	124.64	125.40	126.16	126.92	127.68	128.44
153...	123.93	124.69	125.46	126.22	126.99	127.75	128.52	129.28
154...	124.74	125.51	126.28	127.05	127.82	128.59	129.36	130.13
155...	125.55	126.32	127.10	127.87	128.65	129.42	130.20	130.97
156...	126.36	127.14	127.92	128.70	129.48	130.26	131.04	131.82
157...	127.17	127.95	128.74	129.52	130.31	131.09	131.88	132.66
158...	127.98	128.77	129.56	130.35	131.14	131.93	132.72	133.51
159...	128.79	129.58	130.38	131.17	131.97	132.76	133.56	134.35
160...	129.60	130.40	131.20	132.00	132.80	133.60	134.40	135.20
161...	130.41	131.21	132.02	132.82	133.63	134.43	135.24	136.04
162...	131.22	132.03	132.84	133.65	134.46	135.27	136.08	136.89
163...	132.03	132.84	133.66	134.47	135.29	136.10	136.92	137.73
164...	132.84	133.66	134.48	135.30	136.12	136.94	137.76	138.58
165...	133.65	134.47	135.30	136.12	136.95	137.77	138.60	139.42
166...	134.46	135.29	136.12	136.95	137.78	138.61	139.44	140.27
167...	135.27	136.10	136.94	137.77	138.61	139.44	140.28	141.11
168...	136.08	136.92	137.76	138.60	139.44	140.28	141.12	141.96
169...	136.89	137.73	138.58	139.42	140.27	141.11	141.96	142.80
170...	137.70	138.55	139.40	140.25	141.10	141.95	142.80	143.65
171...	138.51	139.36	140.22	141.07	141.93	142.78	143.64	144.49
172...	139.32	140.18	141.04	141.90	142.76	143.62	144.48	145.34
173...	140.13	140.99	141.86	142.72	143.59	144.45	145.32	146.18
174...	140.94	141.81	142.68	143.55	144.42	145.29	146.16	147.03
175...	141.75	142.62	143.50	144.37	145.25	146.12	147.00	147.87
176...	142.56	143.44	144.32	145.20	146.08	146.96	147.84	148.72
177...	143.37	144.25	145.14	146.02	146.91	147.79	148.68	149.56

True per cent. of proof.	WINE-GALLONS.							
	81	81½	82	82½	83	83½	84	84½
178...	144.18	145.07	145.96	146.85	147.74	148.63	149.52	150.41
179...	144.99	145.88	146.78	147.67	148.57	149.46	150.36	151.25
180...	145.80	146.70	147.60	148.50	149.40	150.30	151.20	152.10
181...	146.61	147.51	148.42	149.32	150.23	151.13	152.04	152.94
182...	147.42	148.33	149.24	150.15	151.06	151.97	152.88	153.79
183...	148.23	149.14	150.06	150.97	151.89	152.80	153.72	154.63
184...	149.04	149.96	150.88	151.80	152.72	153.64	154.56	155.48
185...	149.85	150.77	151.70	152.62	153.55	154.47	155.40	156.32
186...	150.66	151.59	152.52	153.45	154.38	155.31	156.24	157.17
187...	151.47	152.40	153.34	154.27	155.21	156.14	157.08	158.01
188...	152.28	153.22	154.16	155.10	156.04	156.98	157.92	158.86
189...	153.09	154.03	154.98	155.92	156.87	157.81	158.76	159.70
190...	153.90	154.85	155.80	156.75	157.70	158.65	159.60	160.55
191...	154.71	155.66	156.62	157.57	158.53	159.48	160.44	161.39
192...	155.52	156.48	157.44	158.40	159.36	160.32	161.28	162.24
193...	156.33	157.29	158.26	159.22	160.19	161.15	162.12	163.08
194...	157.14	158.11	159.08	160.05	161.02	161.99	162.96	163.93
195...	157.95	158.92	159.90	160.87	161.85	162.82	163.80	164.77
196...	158.76	159.74	160.72	161.70	162.68	163.66	164.64	165.62
197...	159.57	160.55	161.54	162.52	163.51	164.49	165.48	166.46
198...	160.38	161.37	162.36	163.35	164.34	165.33	166.32	167.31
199...	161.19	162.18	163.18	164.17	165.17	166.16	167.16	168.15
200...	162.00	163.00	164.00	165.00	166.00	167.00	168.00	169.00

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
40....	34.00	34.20	34.40	34.60	34.80	35.00	35.20	35.40
41....	34.85	35.05	35.26	35.46	35.67	35.87	36.08	36.28
42....	35.70	35.91	36.12	36.33	36.54	36.75	36.96	37.17
43....	36.55	36.76	36.98	37.19	37.41	37.62	37.84	38.05
44....	37.40	37.62	37.84	38.06	38.28	38.50	38.72	38.94
45....	38.25	38.47	38.70	38.92	39.15	39.37	39.60	39.82
46....	39.10	39.33	39.56	39.79	40.02	40.25	40.48	40.71
47....	39.95	40.18	40.42	40.65	40.89	41.12	41.36	41.59
48....	40.80	41.04	41.28	41.52	41.76	42.00	42.24	42.48
49....	41.65	41.89	42.14	42.38	42.63	42.87	43.12	43.36
50....	42.50	42.75	43.00	43.25	43.50	43.75	44.00	44.25
51....	43.35	43.60	43.86	44.11	44.37	44.62	44.88	45.13
52....	44.20	44.46	44.72	44.98	45.24	45.50	45.76	46.02
53....	45.05	45.31	45.58	45.84	46.11	46.37	46.64	46.90
54....	45.90	46.17	46.44	46.71	46.98	47.25	47.52	47.79
55....	46.75	47.02	47.30	47.57	47.85	48.12	48.40	48.67
56....	47.60	47.88	48.16	48.44	48.72	49.00	49.28	49.56
57....	48.45	48.73	49.02	49.30	49.59	49.87	50.16	50.44
58....	49.30	49.59	49.88	50.17	50.46	50.75	51.04	51.33
59....	50.15	50.44	50.74	51.03	51.33	51.62	51.92	52.21
60....	51.00	51.30	51.60	51.90	52.20	52.50	52.80	53.10
61....	51.85	52.15	52.46	52.76	53.07	53.37	53.68	53.98
62....	52.70	53.01	53.32	53.63	53.94	54.25	54.56	54.87
63....	53.55	53.86	54.18	54.49	54.81	55.12	55.44	55.75
64....	54.40	54.72	55.04	55.36	55.68	56.00	56.32	56.64
65....	55.25	55.57	55.90	56.22	56.55	56.87	57.20	57.52
66....	56.10	56.43	56.76	57.09	57.42	57.75	58.08	58.41
67....	56.95	57.28	57.62	57.95	58.29	58.62	58.96	59.29
68....	57.80	58.14	58.48	58.82	59.16	59.50	59.84	60.18
69....	58.65	58.99	59.34	59.68	60.03	60.37	60.72	61.06
70....	59.50	59.85	60.20	60.55	60.90	61.25	61.60	61.95
71....	60.35	60.70	61.06	61.41	61.77	62.12	62.48	62.83
72....	61.20	61.56	61.92	62.28	62.64	63.00	63.36	63.72
73....	62.05	62.41	62.78	63.14	63.51	63.87	64.24	64.60
74....	62.90	63.27	63.64	64.01	64.38	64.75	65.12	65.49
75....	63.75	64.12	64.50	64.87	65.25	65.62	66.00	66.37
76....	64.60	64.98	65.36	65.74	66.12	66.50	66.88	67.26
77....	65.45	65.83	66.22	66.60	66.99	67.37	67.76	68.14
78....	66.30	66.69	67.08	67.47	67.86	68.25	68.64	69.03
79....	67.15	67.54	67.94	68.33	68.73	69.12	69.52	69.91
80....	68.00	68.40	68.80	69.20	69.60	70.00	70.40	70.80
81....	68.85	69.25	69.66	70.06	70.47	70.87	71.28	71.68
82....	69.70	70.11	70.52	70.93	71.34	71.75	72.16	72.57
83....	70.55	70.96	71.38	71.79	72.21	72.62	73.04	73.45
84....	71.40	71.82	72.24	72.66	73.08	73.50	73.92	74.34
85....	72.25	72.67	73.10	73.52	73.95	74.37	74.80	75.22

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
86...	73.10	73.53	73.96	74.39	74.82	75.25	75.68	76.11
87...	73.95	74.38	74.82	75.25	75.69	76.12	76.56	76.99
88...	74.80	75.24	75.68	76.12	76.56	77.00	77.44	77.88
89...	75.65	76.09	76.54	76.98	77.43	77.87	78.32	78.76
90...	76.50	76.95	77.40	77.85	78.30	78.75	79.20	79.65
91...	77.35	77.80	78.26	78.71	79.17	79.62	80.08	80.53
92...	78.20	78.66	79.12	79.58	80.04	80.50	80.96	81.42
93...	79.05	79.51	79.98	80.44	80.91	81.37	81.84	82.30
94...	79.90	80.37	80.84	81.31	81.78	82.25	82.72	83.19
95...	80.75	81.22	81.70	82.17	82.65	83.12	83.60	84.07
96...	81.60	82.08	82.56	83.04	83.52	84.00	84.48	84.96
97...	82.45	82.93	83.42	83.90	84.39	84.87	85.36	85.84
98...	83.30	83.79	84.28	84.77	85.26	85.75	86.24	86.73
99...	84.15	84.64	85.14	85.63	86.13	86.62	87.12	87.61
100...	85.00	85.50	86.00	86.50	87.00	87.50	88.00	88.50
101...	85.85	86.35	86.86	87.36	87.87	88.37	88.88	89.38
102...	86.70	87.21	87.72	88.23	88.74	89.25	89.76	90.27
103...	87.55	88.06	88.58	89.09	89.61	90.12	90.64	91.15
104...	88.40	88.92	89.44	89.96	90.48	91.00	91.52	92.04
105...	89.25	89.77	90.30	90.82	91.35	91.87	92.40	92.92
106...	90.10	90.63	91.16	91.69	92.22	92.75	93.28	93.81
107...	90.95	91.48	92.02	92.55	93.09	93.62	94.16	94.69
108...	91.80	92.34	92.88	93.42	93.96	94.50	95.04	95.58
109...	92.65	93.19	93.74	94.28	94.83	95.37	95.92	96.46
110...	93.50	94.05	94.60	95.15	95.70	96.25	96.80	97.35
111...	94.35	94.90	95.46	96.01	96.57	97.12	97.68	98.23
112...	95.20	95.76	96.32	96.88	97.44	98.00	98.56	99.12
113...	96.05	96.61	97.18	97.74	98.31	98.87	99.44	100.00
114...	96.90	97.47	98.04	98.61	99.18	99.75	100.32	100.89
115...	97.75	98.32	98.90	99.47	100.05	100.62	101.20	101.77
116...	98.60	99.18	99.76	100.34	100.92	101.50	102.08	102.66
117...	99.45	100.03	100.62	101.20	101.79	102.37	102.96	103.54
118...	100.30	100.89	101.48	102.07	102.66	103.25	103.84	104.43
119...	101.15	101.74	102.34	102.93	103.53	104.12	104.72	105.31
120...	102.00	102.60	103.20	103.80	104.40	105.00	105.60	106.20
121...	102.85	103.45	104.06	104.66	105.27	105.87	106.48	107.08
122...	103.70	104.31	104.92	105.53	106.14	106.75	107.36	107.97
123...	104.55	105.16	105.78	106.39	107.01	107.62	108.24	108.85
124...	105.40	106.02	106.64	107.26	107.88	108.50	109.12	109.74
125...	106.25	106.87	107.50	108.12	108.75	109.37	110.00	110.62
126...	107.10	107.73	108.36	108.99	109.62	110.25	110.88	111.51
127...	107.95	108.58	109.22	109.85	110.49	111.12	111.76	112.39
128...	108.80	109.44	110.08	110.72	111.36	112.00	112.64	113.28
129...	109.65	110.29	110.94	111.58	112.23	112.87	113.52	114.16
130...	110.50	111.15	111.80	112.45	113.10	113.75	114.40	115.05
131...	111.35	112.00	112.66	113.31	113.97	114.62	115.28	115.93

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
132...	112.20	112.86	113.52	114.18	114.84	115.50	116.16	116.82
133...	113.05	113.71	114.38	115.04	115.71	116.37	117.04	117.70
134...	113.90	114.57	115.24	115.91	116.58	117.25	117.92	118.59
135...	114.75	115.42	116.10	116.77	117.45	118.12	118.80	119.47
136...	115.60	116.28	116.96	117.64	118.32	119.00	119.68	120.36
137...	116.45	117.13	117.82	118.50	119.19	119.87	120.56	121.24
138...	117.30	117.99	118.68	119.37	120.06	120.75	121.44	122.13
139...	118.15	118.84	119.54	120.23	120.93	121.62	122.32	133.01
140...	119.00	119.70	120.40	121.10	121.80	122.50	123.20	123.90
141...	119.85	120.55	121.26	121.96	122.67	123.37	124.08	124.78
142...	120.70	121.41	122.12	122.83	123.54	124.25	124.96	125.67
143...	121.55	122.26	122.98	123.69	124.41	125.12	125.84	126.55
144...	122.40	123.12	123.84	124.56	125.28	126.00	126.72	127.44
145...	123.25	123.97	124.70	125.42	126.15	126.87	127.60	128.32
146...	124.10	124.83	125.56	126.29	127.02	127.75	128.48	129.21
147...	124.95	125.68	126.42	127.15	127.89	128.62	129.36	130.09
148...	125.80	126.54	127.28	128.02	128.76	129.50	130.24	130.98
149...	126.65	127.39	128.14	128.88	129.63	130.37	131.12	131.86
150...	127.50	128.25	129.00	129.75	130.50	131.25	132.00	132.75
151...	128.35	129.10	129.86	130.61	131.37	132.12	132.88	133.63
152...	129.20	129.96	130.72	131.48	132.24	133.00	133.76	134.52
153...	130.05	130.81	131.58	132.34	133.11	133.87	134.64	135.40
154...	130.90	131.67	132.44	133.21	133.98	134.75	135.52	136.29
155...	131.75	132.52	133.30	134.07	134.85	135.62	136.40	137.17
156...	132.60	133.38	134.16	134.94	135.72	136.50	137.28	138.06
157...	133.45	134.23	135.02	135.80	136.59	137.37	138.16	138.94
158...	134.30	135.09	135.88	136.67	137.46	138.25	139.04	139.83
159...	135.15	135.94	136.74	137.53	138.33	139.12	139.92	140.71
160...	136.00	136.80	137.60	138.40	139.20	140.00	140.80	141.60
161...	136.85	137.65	138.46	139.26	140.07	140.87	141.68	142.48
162...	137.70	138.51	139.32	140.13	140.94	141.75	142.56	143.37
163...	138.55	139.36	140.18	140.99	141.81	142.62	143.44	144.25
164...	139.40	140.22	141.04	141.86	142.68	143.50	144.32	145.14
165...	140.25	141.07	141.90	142.72	143.55	144.37	145.20	146.02
166...	141.10	141.93	142.76	143.59	144.42	145.25	146.08	146.91
167...	141.95	142.78	143.62	144.45	145.29	146.12	146.96	147.79
168...	142.80	143.64	144.48	145.32	146.16	147.00	147.84	148.68
169...	143.65	144.49	145.34	146.18	147.03	147.87	148.72	149.56
170...	144.50	145.35	146.20	147.05	147.90	148.75	149.60	150.45
171...	145.35	146.20	147.06	147.91	148.77	149.62	150.48	151.33
172...	146.20	147.06	147.92	148.78	149.64	150.50	151.36	152.22
173...	147.05	147.91	148.78	149.64	150.51	151.37	152.24	153.10
174...	147.90	148.77	149.64	150.51	151.38	152.25	153.12	153.99
175...	148.75	149.62	150.50	151.37	152.25	153.12	154.00	154.87
176...	149.60	150.48	151.36	152.24	153.12	154.00	154.88	155.76
177...	150.45	151.33	152,22	153.10	153.99	154.87	155.76	156.64

True per cent. of proof.	WINE-GALLONS.							
	85	85½	86	86½	87	87½	88	88½
178...	151.30	152.19	153.08	153.97	154.86	155.75	156.64	157.53
179...	152.15	153.04	153.94	154.83	155.73	156.62	157.52	158.41
180...	153.00	153.90	154.80	155.70	156.60	157.50	158.40	159.30
181...	153.85	154.75	155.66	156.56	157.47	158.37	159.28	160.18
182...	154.70	155.61	156.52	157.43	158.34	159.25	160.16	161.07
183...	155.55	156.46	157.38	158.29	159.21	160.12	161.04	161.95
184...	156.40	157.32	158.24	159.16	160.08	161.00	161.92	162.84
185...	157.25	158.17	159.10	160.02	160.95	161.87	162.80	153.72
186...	158.10	159.03	159.96	160.89	161.82	162.75	163.68	164.61
187...	158.95	159.88	160.82	161.75	162.69	163.62	164.56	165.49
188...	159.80	160.74	161.68	162.62	163.56	164.50	165.44	166.38
189...	160.65	161.59	162.54	163.48	164.43	165.37	166.32	167.26
190...	161.50	162.45	163.40	164.35	165.30	166.25	167.20	168.15
191...	162.35	163.30	164.26	165.21	166.17	167.12	168.08	169.03
192...	163.20	164.16	165.12	166.08	167.04	168.00	168.96	169.92
193...	164.05	165.01	165.98	166.94	167.91	168.87	169.84	170.80
194...	164.90	165.87	166.84	167.81	168.78	169.75	170.72	171.69
195...	165.75	166.72	167.70	168.67	169.65	170.62	171.60	172.57
196...	166.60	167.58	168.56	169.54	170.52	171.50	172.48	173.46
197...	167.45	168.43	169.42	170.40	171.39	172.37	173.36	174.34
198...	168.30	169.29	170.28	171.27	172.26	173.25	174.24	175.23
199...	169.15	170.14	171.14	172.13	173.13	174.12	175.12	176.11
200...	170.00	171.00	172.00	173.00	174.00	175.00	176.00	177.00

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
40....	35.60	35.80	36.00	36.20	36.40	36.60	36.80	37.00
41....	36.49	36.69	36.90	37.10	37.31	37.51	37.72	37.92
42....	37.38	37.59	37.80	38.01	38.22	38.43	38.64	38.85
43....	38.27	38.48	38.70	38.91	39.13	39.34	39.56	39.77
44....	39.16	39.38	39.60	39.82	40.04	40.26	40.48	40.70
45....	40.05	40.27	40.50	40.72	40.95	41.17	41.40	41.62
46....	40.94	41.17	41.40	41.63	41.86	42.09	42.32	42.55
47....	41.83	42.06	42.30	42.53	42.77	43.00	43.24	43.47
48....	42.72	42.96	43.20	43.44	43.68	43.92	44.16	44.40
49....	43.61	43.85	44.10	44.34	44.59	44.83	45.08	45.32
50....	44.50	44.75	45.00	45.25	45.50	45.75	46.00	46.25
51....	45.39	45.64	45.90	46.15	46.41	46.66	46.92	47.17
52....	46.28	46.54	46.80	47.06	47.32	47.58	47.84	48.10
53....	47.17	47.43	47.70	47.96	48.23	48.49	48.76	49.02
54....	48.06	48.33	48.60	48.87	49.14	49.41	49.68	49.95
55....	48.95	49.22	49.50	49.77	50.05	50.32	50.60	50.87
56....	49.84	50.12	50.40	50.68	50.96	51.24	51.52	51.80
57....	50.73	51.01	51.30	51.58	51.87	52.15	52.44	52.72
58....	51.62	51.91	52.20	52.49	52.78	53.07	53.36	53.65
59....	52.51	52.80	53.10	53.39	53.69	53.98	54.28	54.57
60....	53.40	53.70	54.00	54.30	54.60	54.90	55.20	55.50
61....	54.29	54.59	54.90	55.20	55.51	55.81	56.12	56.42
62....	55.18	55.49	55.80	56.11	56.42	56.73	57.04	57.35
63....	56.07	56.38	56.70	57.01	57.33	57.64	57.96	58.27
64....	56.96	57.28	57.60	57.92	58.24	58.56	58.88	59.20
65....	57.85	58.17	58.50	58.82	59.15	59.47	59.80	60.12
66....	58.74	59.07	59.40	59.73	60.06	60.39	60.72	61.05
67....	59.63	59.96	60.30	60.63	60.97	61.30	61.64	61.97
68....	60.52	60.86	61.20	61.54	61.88	62.22	62.56	62.90
69....	61.41	61.75	62.10	62.44	62.79	63.13	63.48	63.82
70....	62.30	62.65	63.00	63.35	63.70	64.05	64.40	64.75
71....	63.19	63.54	63.90	64.25	64.61	64.96	65.32	65.67
72....	64.08	64.44	64.80	65.16	65.52	65.88	66.24	66.60
73....	64.97	65.33	65.70	66.06	66.43	66.79	67.16	67.52
74....	65.86	66.23	66.60	66.97	67.34	67.71	68.08	68.45
75....	66.75	67.12	67.50	67.87	68.25	68.62	69.00	69.37
76....	67.64	68.02	68.40	68.78	69.16	69.54	69.92	70.30
77....	68.53	68.91	69.30	69.68	70.07	70.45	70.84	71.22
78....	69.42	69.81	70.20	70.59	70.98	71.37	71.76	72.15
79....	70.31	70.70	71.10	71.49	71.89	72.28	72.68	73.07
80....	71.20	71.60	72.00	72.40	72.80	73.20	73.60	74.00
81....	72.09	72.49	72.90	73.30	73.71	74.11	74.52	74.92
82....	72.98	73.39	73.80	74.21	74.62	75.03	75.44	75.85
83....	73.87	74.28	74.70	75.11	75.53	75.94	76.36	76.77
84....	74.76	75.18	75.60	76.02	76.44	76.86	77.28	77.70
85....	75.65	76.07	76.50	76.92	77.35	77.77	78.20	78.62

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
86...	76.54	76.97	77.40	77.83	78.26	78.69	79.12	79.55
87...	77.43	77.86	78.30	78.73	79.17	79.60	80.04	80.47
88...	78.32	78.76	79.20	79.64	80.08	80.52	80.96	81.40
89...	79.21	79.65	80.10	80.54	80.99	81.43	81.88	82.32
90...	80.10	80.55	81.00	81.45	81.90	82.35	82.80	83.25
91...	80.99	81.44	81.90	82.35	82.81	83.26	83.72	84.17
92...	81.88	82.34	82.80	83.26	83.72	84.18	84.64	85.10
93...	82.77	83.23	83.70	84.16	84.63	85.09	85.56	86.02
94...	83.66	84.13	84.60	85.07	85.54	86.01	86.48	86.95
95...	84.55	85.02	85.50	85.97	86.45	86.92	87.40	87.87
96...	85.44	85.92	86.40	86.88	87.36	87.84	88.32	88.80
97...	86.33	86.81	87.30	87.78	88.27	88.75	89.24	89.72
98...	87.22	87.71	88.20	88.69	89.18	89.67	90.16	90.65
99...	88.11	88.60	89.10	89.59	90.09	90.58	91.08	91.57
100...	89.00	89.50	90.00	90.50	91.00	91.50	92.00	92.50
101...	89.89	90.39	90.90	91.40	91.91	92.41	92.92	93.42
102...	90.78	91.29	91.80	92.31	92.82	93.33	93.84	94.35
103...	91.67	92.18	92.70	93.21	93.73	94.24	94.76	95.27
104...	92.56	93.08	93.60	94.12	94.64	95.16	95.68	96.20
105...	93.45	93.97	94.50	95.02	95.55	96.07	96.60	97.12
106...	94.34	94.87	95.40	95.93	96.46	96.99	97.52	98.05
107...	95.23	95.76	96.30	96.83	97.37	97.90	98.44	98.97
108...	96.12	96.66	97.20	97.74	98.28	98.82	99.36	99.90
109...	97.01	97.55	98.10	98.64	99.19	99.73	100.28	100.82
110...	97.90	98.45	99.00	99.55	100.10	100.65	101.20	101.75
111...	98.79	99.34	99.90	100.45	101.01	101.56	102.12	102.67
112...	99.68	100.24	100.80	101.36	101.92	102.48	103.04	103.60
113...	100.57	101.13	101.70	102.26	102.83	103.39	103.96	104.52
114...	101.46	102.03	102.60	103.17	103.74	104.31	104.88	105.45
115...	102.35	102.92	103.50	104.07	104.65	105.22	105.80	106.37
116...	103.24	103.82	104.40	104.98	105.56	106.14	106.72	107.30
117...	104.13	104.71	105.30	105.88	106.47	107.05	107.64	108.22
118...	105.02	105.61	106.20	106.79	107.38	107.97	108.56	109.15
119...	105.91	106.50	107.10	107.69	108.29	108.88	109.48	110.07
120...	106.80	107.40	108.00	108.60	109.20	109.80	110.40	111.00
121...	107.69	108.29	108.90	109.50	110.11	110.71	111.32	111.92
122...	108.58	109.19	109.80	110.41	111.02	111.63	112.24	112.85
123...	109.47	110.08	110.70	111.31	111.93	112.54	113.16	113.77
124...	110.36	110.98	111.60	112.22	112.84	113.46	114.08	114.70
125...	111.25	111.87	112.50	113.12	113.75	114.37	115.00	115.62
126...	112.14	112.77	113.40	114.03	114.66	115.29	115.92	116.55
127...	113.03	113.66	114.30	114.93	115.57	116.20	116.84	117.47
128...	113.92	114.56	115.20	115.84	116.48	117.12	117.76	118.40
129...	114.81	115.45	116.10	116.74	117.39	118.03	118.68	119.32
130...	115.70	116.35	117.00	117.65	118.30	118.95	119.60	120.25
131...	116.59	117.24	117.90	118.55	119.21	119.86	120.52	121.17

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
132...	117.48	118.14	118.80	119.46	120.12	120.78	121.44	122.10
133...	118.37	119.03	119.70	120.36	121.03	121.69	122.36	123.02
134...	119.26	119.93	120.60	121.27	121.94	122.61	123.28	123.95
135...	120.15	120.82	121.50	122.17	122.85	123.52	124.20	124.87
136...	121.04	121.72	122.40	123.08	123.76	124.44	125.12	125.80
137...	121.93	122.61	123.30	123.98	124.67	125.35	126.04	126.72
138...	122.82	123.51	124.20	124.89	125.58	126.27	126.96	127.65
139...	123.71	124.40	125.10	125.79	126.49	127.18	127.88	128.57
140...	124.60	125.30	126.00	126.70	127.40	128.10	128.80	129.50
141...	125.49	126.19	126.90	127.60	128.31	129.01	129.72	130.42
142...	126.38	127.09	127.80	128.51	129.22	129.93	130.64	131.35
143...	127.27	127.98	128.70	129.41	130.13	130.84	131.56	132.27
144...	128.16	128.88	129.60	130.32	131.04	131.76	132.48	133.20
145...	129.05	129.77	130.50	131.22	131.95	132.67	133.40	134.12
146...	129.94	130.67	131.40	132.13	132.86	133.59	134.32	135.05
147...	130.83	131.56	132.30	133.03	133.77	134.50	135.24	135.97
148...	131.72	132.46	133.20	133.94	134.68	135.42	136.16	136.90
149...	132.61	133.35	134.10	134.84	135.59	136.33	137.08	137.82
150...	133.50	134.25	135.00	135.75	136.50	137.25	138.00	138.75
151...	134.39	135.14	135.90	136.65	137.41	138.16	138.92	139.67
152...	135.28	136.04	136.80	137.56	138.32	139.08	139.84	140.60
153...	136.17	136.93	137.70	138.46	139.23	139.99	140.76	141.52
154...	137.06	137.83	138.60	139.37	140.14	140.91	141.68	142.45
155...	137.95	138.72	139.50	140.27	141.05	141.82	142.60	143.37
156...	138.84	139.62	140.40	141.18	141.96	142.74	143.52	144.30
157...	139.73	140.51	141.30	142.08	142.87	143.65	144.44	145.22
158...	140.62	141.41	142.20	142.99	143.78	144.57	145.36	146.15
159...	141.51	142.30	143.10	143.89	144.69	145.48	146.28	147.07
160...	142.40	143.20	144.00	144.80	145.60	146.40	147.20	148.00
161...	143.29	144.09	144.90	145.70	146.51	147.31	148.12	148.92
162...	144.18	144.99	145.80	146.61	147.42	148.23	149.04	149.85
163...	145.07	145.88	146.70	147.51	148.33	149.14	149.96	150.77
164...	145.96	146.78	147.60	148.42	149.24	150.06	150.88	151.70
165...	146.85	147.67	148.50	149.32	150.15	150.97	151.80	152.62
166...	147.74	148.57	149.40	150.23	151.06	151.89	152.72	153.55
167...	148.63	149.46	150.30	151.13	151.97	152.80	153.64	154.47
168...	149.52	150.36	151.20	152.04	152.88	153.72	154.56	155.40
169...	150.41	151.25	152.10	152.94	153.79	154.63	155.48	156.32
170...	151.30	152.15	153.00	153.85	154.70	155.55	156.40	157.25
171...	152.19	153.04	153.90	154.75	155.61	156.46	157.32	158.17
172...	153.08	153.94	154.80	155.66	156.52	157.38	158.24	159.10
173...	153.97	154.83	155.70	156.56	157.43	158.29	159.16	160.02
174...	154.86	155.73	156.60	157.47	158.34	159.21	160.08	160.95
175...	155.75	156.62	157.50	158.37	159.25	160.12	161.00	161.87
176...	156.64	157.52	158.40	159.28	160.16	161.04	161.92	162.80
177...	157.53	158.41	159.30	160.18	161.07	161.95	162.84	163.72

True per cent. of proof.	WINE-GALLONS.							
	89	89½	90	90½	91	91½	92	92½
178...	158.42	159.31	160.20	161.09	161.98	162.87	163.76	164.65
179...	159.31	160.20	161.10	161.99	162.89	163.78	164.68	165.57
180...	160.20	161.10	162.00	162.90	163.80	164.70	165.60	166.50
181...	161.09	161.99	162.90	163.80	164.71	165.61	166.52	167.42
182...	161.98	162.89	163.80	164.71	165.62	166.53	167.44	168.35
183...	162.87	163.78	164.70	165.61	166.53	167.44	168.36	169.27
184...	163.76	164.68	165.60	166.52	167.44	168.36	169.28	170.20
185...	164.65	165.57	166.50	167.42	168.35	169.27	170.20	171.12
186...	165.54	166.47	167.40	168.33	169.26	170.19	171.12	172.05
187...	166.43	167.36	168.30	169.23	170.17	171.10	172.04	172.97
188...	167.32	168.26	169.20	170.14	171.08	172.02	172.96	173.90
189...	168.21	169.15	170.10	171.04	171.99	172.93	173.88	174.82
190...	169.10	170.05	171.00	171.95	172.90	173.85	174.80	175.75
191...	169.99	170.94	171.90	172.85	173.81	174.76	175.72	176.67
192...	170.88	171.84	172.80	173.76	174.72	175.68	176.64	177.60
193...	171.77	172.73	173.70	174.66	175.63	176.59	177.56	178.52
194...	172.66	173.63	174.60	175.57	176.54	177.51	178.48	179.45
195...	173.55	174.52	175.50	176.47	177.45	178.42	179.40	180.37
196...	174.44	175.42	176.40	177.38	178.36	179.34	180.32	181.30
197...	175.33	176.31	177.30	178.28	179.27	180.25	181.24	182.22
198...	176.22	177.21	178.20	179.19	180.18	181.17	182.16	183.15
199...	177.11	178.10	179.10	180.09	181.09	182.08	183.08	184.07
200...	178.00	179.00	180.00	181.00	182.00	183.00	184.00	185.00

True per cent. of proof.	WINE-GALLONS.							
	93	93½	94	94½	95	95½	96	96½
40....	37.20	37.40	37.60	37.80	38.00	38.20	38.40	38.60
41....	38.13	38.33	38.54	38.74	38.95	39.15	39.36	39.56
42....	39.06	39.27	39.48	39.69	39.90	40.11	40.32	40.53
43....	39.99	40.20	40.42	40.63	40.85	41.06	41.28	41.49
44....	40.92	41.14	41.36	41.58	41.80	42.02	42.24	42.46
45....	41.85	42.07	42.30	42.52	42.75	42.97	43.20	43.42
46....	42.78	43.01	43.24	43.47	43.70	43.93	44.16	44.39
47....	43.71	43.94	44.18	44.41	44.65	44.88	45.12	45.35
48....	44.64	44.88	45.12	45.36	45.60	45.84	46.08	46.32
49....	45.57	45.81	46.06	46.30	46.55	46.79	47.04	47.28
50....	46.50	46.75	47.00	47.25	47.50	47.75	48.00	48.25
51....	47.43	47.68	47.94	48.19	48.45	48.70	48.96	49.21
52....	48.36	48.62	48.88	49.14	49.40	49.66	49.92	50.18
53....	49.29	49.55	49.82	50.08	50.35	50.61	50.88	51.14
54....	50 22	50.49	50.76	51.03	51.30	51.57	51.84	52.11
55....	51.15	51.42	51.70	51.97	52.25	52.52	52.80	53.07
56....	52.08	52.36	52.64	52.92	53.20	53.48	53.76	54.04
57....	53.01	53.29	53.58	53.86	54.15	54.43	54.72	55.00
58....	53.94	54.23	54.52	54.81	55.10	55.39	55.68	55.97
59....	54.87	55.16	55.46	55.75	56.05	56.34	56.64	56.93
60....	55.80	56.10	56.40	56.70	57.00	57.30	57.60	57.90
61....	56.73	57.03	57.34	57.64	57.95	58.25	58.56	58.86
62....	57.66	57.97	58.28	58.59	58.90	59.21	59.52	59.83
63....	58.59	58.90	59.22	59.53	59.85	60.16	60.48	60.79
64....	59.52	59.84	60.16	60.48	60.80	61.12	61.44	61.76
65....	60.45	60.77	61.10	61.42	61.75	62.07	62.40	62.72
66....	61.38	61.71	62.04	62.37	62.70	63.03	63.36	63.69
67....	62.31	62.64	62.98	63.31	63.65	63.98	64.32	64.65
68....	63.24	63.58	63.92	64.26	64.60	64.94	65.28	65.62
69....	64.17	64.51	64.86	65.20	65.55	65.89	66.24	66.58
70....	65.10	65.45	65.80	66.15	66.50	66.85	67.20	67.55
71....	66.03	66.38	66.74	67.09	67.45	67.80	68.16	68.51
72....	66.96	67.32	67.68	68.04	68.40	68.76	69.12	69.48
73....	67.89	68.25	68.62	68.98	69.35	69.71	70.08	70.44
74....	68.82	69.19	69.56	69.93	70.30	70.67	71.04	71.41
75....	69.75	70.12	70.50	70.87	71.25	71.62	72.00	72.37
76....	70.68	71.06	71.44	71.82	72.20	72.58	72.96	73.34
77....	71.61	71.99	72.38	72.76	73.15	73.53	73.92	74.30
78....	72.54	72.93	73.32	73.71	74.10	74.49	74.88	75.27
79....	73.47	73.86	74.26	74.65	75.05	75.44	75.84	76.23
80....	74.40	74.80	75.20	75.60	76.00	76.40	76.80	77.20
81....	75.33	75.73	76.14	76.54	76.95	77.35	77.76	78.16
82....	76.26	76.67	77.08	77.49	77.90	78.31	78.72	79.13
83....	77.19	77.60	78.02	78.43	78.85	79.26	79.68	80.09
84....	78.12	78.54	78.96	79.38	79.80	80.22	80.64	81.06
85....	79.05	79.47	79.90	80.32	80.75	81.17	81.60	82.02

True per cent. of proof.	WINE GALLONS.							
	93	93½	94	94½	95	95½	96	96½
86...	79.98	80.41	80.84	81.27	81.70	82.13	82.56	82.99
87...	80.91	81.34	81.78	82.21	82.65	83.08	83.52	83.95
88...	81.84	82.28	82.72	83.16	83.60	84.04	84.48	84.92
89...	82.77	83.21	83.66	84.10	84.55	84.99	85.44	85.88
90...	83.70	84.15	84.60	85.05	85.50	85.95	86.40	86.85
91...	84.63	85.08	85.54	85.99	86.45	86.90	87.36	87.81
92...	85.56	86.02	86.48	86.94	87.40	87.86	88.32	88.78
93...	86.49	86.95	87.42	87.88	88.35	88.81	89.28	89.74
94...	87.42	87.89	88.36	88.83	89.30	89.77	90.24	90.71
95...	88.35	88.82	89.30	89.77	90.25	90.72	91.20	91.67
96...	89.28	89.76	90.24	90.72	91.20	91.68	92.16	92.64
97...	90.21	90.69	91.18	91.66	92.15	92.63	93.12	93.60
98...	91.14	91.63	92.12	92.61	93.10	93.59	94.08	94.57
99...	92.07	92.56	93.06	93.55	94.05	94.54	95.04	95.53
100...	93.00	93.50	94.00	94.50	95.00	95.50	96.00	96.50
101...	93.93	94.43	94.94	95.44	95.95	96.45	96.96	97.46
102...	94.86	95.37	95.88	96.39	96.90	97.41	97.92	98.43
103...	95.79	96.30	96.82	97.33	97.85	98.36	98.88	99.39
104...	96.72	97.24	97.76	98.28	98.80	99.32	99.84	100.36
105...	97.65	98.17	98.70	99.22	99.75	100.27	100.80	101.32
106...	98.58	99.11	99.64	100.17	100.70	101.23	101.76	102.29
107...	99.51	100.04	100.58	101.11	101.65	102.18	102.72	103.25
108...	100.44	100.98	101.52	102.06	102.60	103.14	103.68	104.22
109...	101.37	101.91	102.46	103.00	103.55	104.09	104.64	105.18
110...	102.30	102.85	103.40	103.95	104.50	105.05	105.60	106.15
111...	103.23	103.78	104.34	104.89	105.45	106.00	106.56	107.11
112...	104.16	104.72	105.28	105.84	106.40	106.96	107.52	108.08
113...	105.09	105.65	106.22	106.78	107.35	107.91	108.48	109.04
114...	106.02	106.59	107.16	107.73	108.30	108.87	109.44	110.01
115...	106.95	107.52	108.10	108.67	109.25	109.82	110.40	110.97
116...	107.88	108.46	109.04	109.62	110.20	110.78	111.36	111.94
117...	108.81	109.39	109.98	110.56	111.15	111.73	112.32	112.90
118...	109.74	110.33	110.92	111.51	112.10	112.69	113.28	113.87
119...	110.67	111.26	111.86	112.45	113.05	113.64	114.24	114.83
120...	111.60	112.20	112.80	113.40	114.00	114.60	115.20	115.80
121...	112.53	113.13	113.74	114.34	114.95	115.55	116.16	116.76
122...	113.46	114.07	114.68	115.29	115.90	116.51	117.12	117.73
123...	114.39	115.00	115.62	116.23	116.85	117.46	118.08	118.69
124...	115.32	115.94	116.56	117.18	117.80	118.42	119.04	119.66
125...	116.25	116.87	117.50	118.12	118.75	119.37	120.00	120.62
126...	117.18	117.81	118.44	119.07	119.70	120.33	120.96	121.59
127...	118.11	118.74	119.38	120.01	120.65	121.28	121.92	122.55
128...	119.04	119.68	120.32	120.96	121.60	122.24	122.88	123.52
129...	119.97	120.61	121.26	121.90	122.55	123.19	123.84	124.48
130...	120.90	121.55	122.20	122.85	123.50	124.15	124.80	125.45
131...	121.83	122.48	123.14	123.79	124.45	125.10	125.76	126.41

True per cent. of proof.	WINE-GALLONS.							
	93	93½	94	94½	95	95½	96	96½
132...	122.76	123.42	124.08	124.74	125.40	126.06	126.72	127.38
133...	123.69	124.35	125.02	125.68	126.35	127.01	127.68	128.34
134...	124.62	125.29	125.96	126.63	127.30	127.97	128.64	129.31
135...	125.55	126.22	126.90	127.57	128.25	128.92	129.60	130.27
136...	126.48	127.16	127.84	128.52	129.20	129.88	130.56	131.24
137...	127.41	128.09	128.78	129.46	130.15	130.83	131.52	132.20
138...	128.34	129.03	129.72	130.41	131.10	131.79	132.48	133.17
139...	129.27	129.96	130.66	131.35	132.05	132.74	133.44	134.13
140...	130.20	130.90	131.60	132.30	133.00	133.70	134.40	135.10
141...	131.13	131.83	132.54	133.24	133.95	134.65	135.36	136.06
142...	132.06	132.77	133.48	134.19	134.90	135.61	136.32	137.03
143...	132.99	133.70	134.42	135.13	135.85	136.56	137.28	137.99
144...	133.92	134.64	135.36	136.08	136.80	137.52	138.24	138.96
145...	134.85	135.57	136.30	137.02	137.75	138.47	139.20	139.92
146...	135.78	136.51	137.24	137.97	138.70	139.43	140.16	140.89
147...	136.71	137.44	138.18	138.91	139.65	140.38	141.12	141.85
148...	137.64	138.38	139.12	139.86	140.60	141.34	142.08	142.82
149...	138.57	139.31	140.06	140.80	141.55	142.29	143.04	143.78
150...	139.50	140.25	141.00	141.75	142.50	143.25	144.00	144.75
151...	140.43	141.18	141.94	142.69	143.45	144.20	144.96	145.71
152...	141.36	142.12	142.88	143.64	144.40	145.16	145.92	146.68
153...	142.29	143.05	143.82	144.58	145.35	146.11	146.88	147.64
154...	143.22	143.99	144.76	145.53	146.30	147.07	147.84	148.61
155...	144.15	144.92	145.70	146.47	147.25	148.02	148.80	149.57
156...	145.08	145.86	146.64	147.42	148.20	148.98	149.76	150.54
157...	146.01	146.79	147.58	148.36	149.15	149.93	150.72	151.50
158...	146.94	147.73	148.52	149.31	150.10	150.89	151.68	152.47
159...	147.87	148.66	149.46	150.25	151.05	151.84	152.64	153.43
160...	148.80	149.60	150.40	151.20	152.00	152.80	153.60	154.40
161...	149.73	150.53	151.34	152.14	152.95	153.75	154.56	155.36
162...	150.66	151.47	152.28	153.09	153.90	154.71	155.52	156.33
163...	151.59	152.40	153.22	154.03	154.85	155.66	156.48	157.29
164...	152.52	153.34	154.16	154.98	155.80	156.62	157.44	158.26
165...	153.45	154.27	155.10	155.92	156.75	157.57	158.40	159.22
166...	154.38	155.21	156.04	156.87	157.70	158.53	159.36	160.19
167..	155.31	156.14	156.98	157.81	158.65	159.48	160.32	161.15
168...	156.24	157.08	157.92	158.76	159.60	160.44	161.28	162.12
169...	157.17	158.01	158.86	159.70	160.55	161.39	162.24	163.08
170...	158.10	158.95	159.80	160.65	161.50	162.35	163.20	164.05
171...	159.03	159.88	160.74	161.59	162.45	163.30	164.16	165.01
172...	159.96	160.82	161.68	162.54	163.40	164.26	165.12	165.98
173...	160.89	161.75	162.62	163.48	164.35	165.21	166.08	166.94
174...	161.82	162.69	163.56	164.43	165.30	166.17	167.04	167.91
175...	162.75	163.62	164.50	165.37	166.25	167.12	168.00	168.87
176...	163.68	164.56	165.44	166.32	167.20	168.08	168.96	169.84
177...	164.61	165.49	166.38	167.26	168.15	169.03	169.92	170.80

True per cent. of proof.	WINE-GALLONS.							
	93	93½	94	94½	95	95½	96	96½
178...	165.54	166.43	167.32	168.21	169.10	169.99	170.88	171.77
179...	166.47	167.36	168.26	169.15	170.05	170.94	171.84	172.73
180...	167.40	168.30	169.20	170.10	171.00	171.90	172.80	173.70
181...	168.33	169.23	170.14	171.04	171.95	172.85	173.76	174.66
182...	169.26	170.17	171.08	171.99	172.90	173.81	174.72	175.63
183...	170.19	171.10	172.02	172.93	173.85	174.76	175.68	176.59
184...	171.12	172.04	172.96	173.88	174.80	175.72	176.64	177.56
185...	172.05	172.97	173.90	174.82	175.75	176.67	177.60	178.52
186...	172.98	173.91	174.84	175.77	176.70	177.63	178.56	179.49
187...	173.91	174.84	175.78	176.71	177.65	178.58	179.52	180.45
188...	174.84	175.78	176.72	177.66	178.60	179.54	180.48	181.42
189...	175.77	176.71	177.66	178.60	179.55	180.49	181.44	182.38
190...	176.70	177.65	178.60	179.55	180.50	181.45	182.40	183.35
191...	177.63	178.58	179.54	180.49	181.45	182.40	183.36	184.31
192...	178.56	179.52	180.48	181.44	182.40	183.36	184.32	185.28
193...	179.49	180.45	181.42	182.38	183.35	184.31	185.28	186.24
194...	180.42	181.39	182.36	183.33	184.30	185.27	186.24	187.21
195...	181.35	182.32	183.30	184.27	185.25	186.22	187.20	188.17
196...	182.28	183.26	184.24	185.22	186.20	187.18	188.16	189.14
197...	183.21	184.19	185.18	186.16	187.15	188.13	189.12	190.10
198...	184.14	185.13	186.12	187.11	188.10	189.09	190.08	191.07
199...	185.07	186.06	187.06	188.05	189.05	190.04	191.04	192.03
200...	186.00	187.00	188.00	189.00	190.00	191.00	192.00	193.00

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
40....	38.80	39.00	39.20	39.40	39.60	39.80	40.00	.....
41....	39.77	39.97	40.18	40.38	40.59	40.79	41.00	.....
42....	40.74	40.95	41.16	41.37	41.58	41.79	42.00	.....
43....	41.71	41.92	42.14	42.35	42.57	42.78	43.00	.....
44....	42.68	42.90	43.12	43.34	43.56	43.78	44.00	.....
45....	43.65	43.87	44.10	44.32	44.55	44.77	45.00	.....
46....	44.62	44.85	45.08	45.31	45.54	45.77	46.00	.....
47....	45.59	45.82	46.06	46.29	46.53	46.76	47.00	.....
48....	46.56	46.80	47.04	47.28	47.52	47.76	48.00	.....
49....	47.53	47.77	48.02	48.26	48.51	48.75	49.00	.....
50....	48.50	48.75	49.00	49.25	49.50	49.75	50.00	.....
51....	49.47	49.72	49.98	50.23	50.49	50.74	51.00	.....
52....	50.44	50.70	50.96	51.22	51.48	51.74	52.00	.....
53....	51.41	51.67	51.94	52.20	52.47	52.73	53.00	.....
54....	52.38	52.65	52.92	53.19	53.46	53.73	54.00	.....
55....	53.35	53.62	53.90	54.17	54.45	54.72	55.00	.....
56....	54.32	54.60	54.88	55.16	55.44	55.72	56.00	.....
57....	55.29	55.57	55.86	56.14	56.43	56.71	57.00	.....
58....	56.26	56.55	56.84	57.13	57.42	57.71	58.00	.....
59....	57.23	57.52	57.82	58.11	58.41	58.70	59.00	.....
60....	58.20	58.50	58.80	59.10	59.40	59.70	60.00	.....
61....	59.17	59.47	59.78	60.08	60.39	60.69	61.00	.....
62....	60.14	60.45	60.76	61.07	61.38	61.69	62.00	.....
63....	61.11	61.42	61.74	62.05	62.37	62.68	63.00	.....
64....	62.08	62 40	62.72	63.04	63.36	63.68	64.00	.....
65....	63.05	63.37	63.70	64.02	64.35	64.67	65.00	.....
66....	64.02	64.35	64.68	65.01	65.34	65.67	66.00	.....
67....	64.99	65.32	65.66	65.99	66.33	66.66	67.00	.....
68....	65.96	66.30	66.64	66.98	67.32	67.66	68.00	.....
69....	66.93	67.27	67.62	67.96	68.31	68.65	69.00	.....
70....	67.90	68.25	68.60	68.95	69.30	69.65	70.00	.....
71....	68.87	69.22	69.58	69.93	70.29	70.64	71.00	.....
72....	69.84	70.20	70.56	70.92	71.28	71.64	72.00	.....
73....	70.81	71.17	71.54	71.90	72.27	72.63	73.00	.....
74....	71.78	72.15	72.52	72.89	73.26	73.63	74.00	.....
75....	72.75	73.12	73.50	73.87	74.25	74.62	75.00	.....
76....	73.72	74.10	74.48	74.86	75.24	75.62	76.00	.....
77....	74.69	75.07	75.46	75.84	76.23	76.61	77.00	.....
78....	75.66	76.05	76.44	76.83	77.22	77.61	78.00	.....
79....	76.63	77.02	77.42	77.81	78.21	78.60	79.00	.....
80....	77.60	78.00	78.40	78.80	79.20	79.60	80.00	.....
81....	78.57	78.97	79.38	79.78	80.19	80.59	81.00	.....
82....	79.54	79.95	80.36	80.77	81.18	81.59	82.00	.....
83....	80.51	80.92	81.34	81.75	82.17	82.58	83.00	.....
84....	81.48	81.90	82.32	82.74	83.16	83.58	84.00	.....
85....	82.45	82.87	83.30	83.72	84.15	84.57	85.00	.....

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
86...	83.42	83.85	84.28	84.71	85.14	85.57	86.00	.....
87...	84.39	84.82	85.26	85.69	86.13	86.56	87.00	.....
88...	85.36	85.80	86.24	86.68	87.12	87.56	88.00	.....
89...	86.33	86.77	87.22	87.66	88.11	88.55	89.00	.....
90...	87.30	87.75	88.20	88.65	89.10	89.55	90.00	.....
91...	88.27	88.72	89.18	89.63	90.09	90.54	91.00	.....
92...	89.24	89.70	90.16	90.62	91.08	91.54	92.00	.....
93...	90.21	90.67	91.14	91.60	92.07	92.53	93.00	.....
94...	91.18	91.65	92.12	92.59	93.06	93.53	94.00	.....
95...	92.15	92.62	93.10	93.57	94.05	94.52	95.00	.....
96...	93.12	93.60	94.08	94.56	95.04	95.52	96.00	.....
97...	94.09	94.57	95.06	95.54	96.03	96.51	97.00	.....
98...	95.06	95.55	96.04	96.53	97.02	97.51	98.00	.....
99...	96.03	96.52	97.02	97.51	98.01	98.50	99.00	.....
100...	97.00	97.50	98.00	98.50	99.00	99.50	100.00	.....
101...	97.97	98.47	98.98	99.48	99.99	100.49	101.00	.....
102...	98.94	99.45	99.96	100.47	100.98	101.49	102.00	.....
103...	99.91	100.42	100.94	101.45	101.97	102.48	103.00	.....
104...	100.88	101.40	101.92	102.44	102.96	103.48	104.00	.....
105...	101.85	102.37	102.90	103.42	103.95	104.47	105.00	.....
106...	102.82	103.35	103.88	104.41	104.94	105.47	106.00	.....
107...	103.79	104.32	104.86	105.39	105.93	106.46	107.00	.....
108...	104.76	105.30	105.84	106.38	106.92	107.46	108.00	.....
109...	105.73	106.27	106.82	107.36	107.91	108.45	109.00	.....
110...	106.70	107.25	107.80	108.35	108.90	109.45	110.00	.....
111...	107.67	108.22	108.78	109.33	109.89	110.44	111.00	.....
112...	108.64	109.20	109.76	110.32	110.88	111.44	112.00	.....
113...	109.61	110.17	110.74	111.30	111.87	112.43	113.00	.....
114...	110.58	111.15	111.72	112.29	112.86	113.43	114.00	.....
115...	111.55	112.12	112.70	113.27	113.85	114.42	115.00	.....
116...	112.52	113.10	113.68	114.26	114.84	115.42	116.00	.....
117...	113.49	114.07	114.66	115.24	115.83	116.41	117.00	.....
118..	114.46	115.05	115.64	116.23	116.82	117.41	118.00	.....
119...	115.43	116.02	116.62	117.21	117.81	118.40	119.00	.....
120...	116.40	117.00	117.60	118.20	118.80	119.40	120.00	.....
121...	117.37	117.97	118.58	119.18	119.79	120.39	121.00	.....
122...	118.34	118.95	119.56	120.17	120.78	121.39	122.00	.....
123...	119.31	119.92	120.54	121.15	121.77	122.38	123.00	.....
124...	120.28	120.90	121.52	122.14	122.76	123.38	124.00	.....
125...	121.25	121.87	122.50	123.12	123.75	124.37	125.00	.....
126...	122.22	122.85	123.48	124.11	124.74	125.37	126.00	.....
127...	123.19	123.82	124.46	125.09	125.73	126.36	127.00	.....
128...	124.16	124.80	125.44	126.08	126.72	127.36	128.00	.....
129...	125.13	125.77	126.42	127.06	127.71	128.35	129.00	.....
130...	126.10	126.75	127.40	128.05	128.70	129.35	130.00	.....
131...	127.07	127.72	128.38	129.03	129.69	130.34	131.00	.....

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
132...	128.04	128.70	129.36	130.02	130.68	131.34	132.00	.....
133...	129.01	129.67	130.34	131.00	131.67	132.33	133.00	.....
134...	129.98	130.65	131.32	131.99	132.66	133.33	134.00	.....
135...	130.95	131.62	132.30	132.97	133.65	134.32	135.00	.....
136...	131.92	132.60	133.28	133.96	134.64	135.32	136.00	.....
137...	132.89	133.57	134.26	134.94	135.63	136.31	137.00	.....
138...	133.86	134.55	135.24	135.93	136.62	137.31	138.00	.....
139...	134.83	135.52	136.22	136.91	137.61	138.30	139.00	.....
140...	135.80	136.50	137.20	137.90	138.60	139.30	140.00	.....
141...	136.77	137.47	138.18	138.88	139.59	140.29	141.00	.....
142...	137.74	138.45	139.16	139.87	140.58	141.29	142.00	.....
143...	138.71	139.42	140.14	140.85	141.57	142.28	143.00	.....
144...	139.68	140.40	141.12	141.84	142.56	143.28	144.00	.....
145...	140.65	141.37	142.10	142.82	143.55	144.27	145.00	.....
146...	141.62	142.35	143.08	143.81	144.54	145.27	146.00	.....
147...	142.59	143.32	144.06	144.79	145.53	146.26	147.00	.....
148...	143.56	144.30	145.04	145.78	146.52	147.26	148.00	.....
149...	144.53	145.27	146.02	146.76	147.51	148.25	149.00	.....
150...	145.50	146.25	147.00	147.75	148.50	149.25	150.00	.....
151...	146.47	147.22	147.98	148.73	149.49	150.24	151.00	.....
152...	147.44	148.20	148.96	149.72	150.48	151.24	152.00	.....
153...	148.41	149.17	149.94	150.70	151.47	152.23	153.00	.....
154...	149.38	150.15	150.92	151.69	152.46	153.23	154.00	.....
155...	150.35	151.12	151.90	152.67	153.45	154.22	155.00	.....
156...	151.32	152.10	152.88	153.66	154.44	155.22	156.00	.....
157...	152.29	153.07	153.86	154.64	155.43	156.21	157.00	.....
158...	153.26	154.05	154.84	155.63	156.42	157.21	158.00	.....
159...	154.23	155.02	155.82	156.61	157.41	158.20	159.00	.....
160...	155.20	156.00	156.80	157.60	158.40	159.20	160.00	.....
161...	156.17	156.97	157.78	158.58	159.39	160.19	161.00	.....
162...	157.14	157.95	158.76	159.57	160.38	161.19	162.00	.....
163...	158.11	158.92	159.74	160.55	161.37	162.18	163.00	.....
164...	159.08	159.90	160.72	161.54	162.36	163.18	164.00	.....
165...	160.05	160.87	161.70	162.52	163.35	164.17	165.00	.....
166...	161.02	161.85	162.68	163.51	164.34	165.17	166.00	.....
167...	161.99	162.82	163.66	164.49	165.33	166.16	167.00	.....
168...	162.96	163.80	164.64	165.48	166.32	167.16	168.00	.....
169...	163.93	164.77	165.62	166.46	167.31	168.15	169.00	.....
170...	164.90	165.75	166.60	167.45	168.30	169.15	170.00	.....
171...	165.87	166.72	167.58	168.43	169.29	170.14	171.00	.....
172...	166.84	167.70	168.56	169.42	170.28	171.14	172.00	.....
173...	167.81	168.67	169.54	170.40	171.27	172.13	173.00	.....
174...	168.78	169.65	170.52	171.39	172.26	173.13	174.00	.....
175...	169.75	170.62	171.50	172.37	173.25	174.12	175.00	.....
176...	170.72	171.60	172.48	173.36	174.24	175.12	176.00	.....
177...	171.69	172.57	173.46	174.34	175.23	176.11	177.00	.....

True per cent. of proof.	WINE-GALLONS.							
	97	97½	98	98½	99	99½	100	
178...	172.66	173.55	174.44	175.33	176.22	177.11	178.00	.....
179...	173.63	174.52	175.42	176.31	177.21	178.10	179.00	.....
180...	174.60	175.50	176.40	177.30	178.20	179.10	180.00	.....
181...	175.57	176.47	177.38	178.28	179.19	180.09	181.00	.....
182...	176.54	177.45	178.36	179.27	180.18	181.09	182.00	.....
183...	177.51	178.42	179.34	180.25	181.17	182.08	183.00	.....
184...	178.48	179.40	180.32	181.24	182.16	183.08	184.00	.....
185...	179.45	180.37	181.30	182.22	183.15	184.07	185.00	.....
186...	180.42	181.35	182.28	183.21	184.14	185.07	186.00	.....
187...	181.39	182.32	183.26	184.19	185.13	186.06	187.00	.....
188...	182.36	183.30	184.24	185.18	186.12	187.06	188.00	.....
189...	183.33	184.27	185.22	186.16	187.11	188.05	189.00	.....
190...	184.30	185.25	186.20	187.15	188.10	189.05	190.00	.....
191...	185.27	186.22	187.18	188.13	189.09	190.04	191.00	.....
192...	186.24	187.20	188.16	189.12	190.08	191.04	192.00	.....
193...	187.21	188.17	189.14	190.10	191.07	192.03	193.00	.....
194...	188.18	189.15	190.12	191.09	192.06	193.03	194.00	.....
195...	189.15	190.12	191.10	192.07	193.05	194.02	195.00	.....
196...	190.12	191.10	192.08	193.06	194.04	195.02	196.00	.....
197...	191.09	192.07	193.06	194.04	195.03	196.01	197.00	.....
198...	192.06	193.05	194.04	195.03	196.02	197.01	198.00	.....
199...	193.03	194.02	195.02	196.01	197.01	198.00	199.00	.....
200...	194.00	195.00	196.00	197.00	198.00	199.00	200.00	.....

TABLE No. 5.

Showing the true per cents. of proof-spirit for any indication of the hydrometer at temperatures between 0° and 100° Fahr., and also the correction to the volume due to temperature.

EXPLANATION OF TABLE No. 5,

AND DIRECTIONS FOR ITS USE.

TRUE PER CENT.

"Proof-spirit shall be held and taken to be that alcoholic liquor which contains one-half its volume of alcohol of a specific gravity of seven thousand nine hundred and thirty-nine ten thousandths (.7939) at sixty degrees Fahrenheit" referred to water at its maximum density as unity. Proof-spirit has, at 60° Fahr., a specific gravity of 0.93353, 100 parts by volume of the same consisting of 50 parts of absolute alcohol and 53.71 parts of water. The difference of the sum of the parts of alcohol and water, and the resulting 100 parts of proof-spirit, is due to the contraction which takes place when alcohol and water combine.

The hydrometers furnished to the gaugers are so graduated as to indicate the number of parts by volume of proof-spirit equivalent to 100 parts of the liquor *at the standard temperature of* 60°

Fahr.; thus they read 0 for water, 100 for proof-spirit, and 200 for absolute alcohol.

It is seldom, however, that the liquor is inspected at 60° Fahr.; and as its density varies with the temperature a correction is necessary for a temperature differing from 60°, the hydrometer giving too low an indication for temperatures below 60, and too high for those above. This correction, applied to the indication of the hydrometer, gives the *true per cent.*, or what the reading of the hydrometer would be were the liquor at 60°.

Table 5 has been prepared accordingly, and exhibits the true per cents by volume of proof-spirit for such indications of the hydrometer at temperatures between 0° and 100° Fahr., as are likely to occur in practice. The left-hand column, headed "Indication," contains the reading of the hydrometer, and on the same horizontal line, in the body of the table, in the "Temperature" column indicated by the thermometer, is found the corrected reading or true per cent.

The table is computed for tenths of a per cent.; but in practice only the nearest whole number of a per cent. need be used, excepting when large quantities are proved at one operation, in which case the decimal must be retained; otherwise,

in reporting true per cents, if the decimal is 5 or less, drop it; if it is 6 or over, add a unit. Thus, page 418, column 23°, indication 143, the true per cent., 155.5, is called 155. Same page and column, indication 142, the true per cent., 154.6, is called 155.

Examples.—The hydrometer reads 130, the thermometer 29°; on page 423, in the temperature column 29°, and opposite indication 130, we find 141, which is the true per cent. of proof-spirit in the liquor. This is the same as 41 *over proof*, according to the ordinary way of speaking.

Suppose the hydrometer reads 150 and the thermometer 85°; on page 511, in temperature column 85°, and against indication 150, we again find 141 for the true per cent.

It may happen that the hydrometer indicates the strength as under proof when it is really over, and *vice versa.*

Examples.—The hydrometer reads 89, the thermometer 29°. On page 421, column 29°, indication 89, we find the true per cent. 102, or 2 *over* proof.

The hydrometer reads 103, the thermometer 86°. On page 518, column 86°, indication 103, we find the true per cent. to be 92, or 8 *under* proof.

VOLUMES.

The last column on each page of Table No. 5 shows the correction required to reduce one hundred gallons, measured at any temperature, to its volume at the standard temperature, 60° Fahr. Each number in this column applies to all the true per cents on the same line and page with it.

As the volumes contract with a decrease and expand with an increase of temperature, below 60° the correction is to be added, and above 60° to be subtracted.

Examples.—Suppose the cask was gauged at the time it was inspected, and that at 28° it contained 121.4 gallons, while the hydrometer read 135. For temperature 28°, and opposite indication 135 (page 423), we find the true per cent. 146, and the correction to volume 1.5, "*add*"

Gallons gauged, - - - - -		121.4
1 per cent., - - - - - - -	+	1.2
5 per cent., - - - - - - -	+	.6
Gallons at 60° Fahr., -		123.2

Suppose that at 85° it contained 124.8 gallons, while hydrometer reads 155. For temper-

ature 85°, and opposite indication 155 (page 512), we find the true per cent. 146, and correction to volume 1.3, "*subtract*"

Gallons gauged, - - - - - -	124.8
1 per cent., - - - - - - - —	1.2
3 per cent., - - - - - - - —	.4
Gallons at 60° Fahr., -	123.2

The above shows that at 60° Fahr., the cask contains 123.2 gallons of spirits of strength 146. In order to find the equivalent number of gallons of proof-spirit multiply 123.2 by 1.46, which may be done thus with the least number of figures:

Multiply by 1, - - - - - - - - - - - - - -	123.2
Multiply by 4, and set back 1 digit, - - -	49.3 [8]
Multiply by 6, and set back 2 digits, - - -	7.3 [92]
	179.9 [72]

The result shows a larger volume of proof-spirit than the actual volume of liquor in the cask. This is because the liquor being of strength 141 is *over* proof, and would require the addition of water to reduce it to proof.

TRUE PER CENT.

Ind. 76 to 100. Temp. 1° to 5°.

Indication.	TEMPERATURES.					Corr. to vol.
	1°	2°	3°	4°	5°	
						Add
76	101·9	101·5	101·0	100·6	100·2	2·3
77	102·8	102·4	101·9	101·5	101·1	2·3
78	103·6	103·2	102·7	102·3	101·9	2·3
79	104·5	104·1	103·6	103·2	102·8	2·3
80	105·3	104·9	104·4	104·0	103·6	2·3
81	106·2	105·8	105·3	104·9	104·5	2·4
82	107·0	106·6	106·2	105·8	105·4	2·4
83	107·9	107·5	107·0	106·6	106·2	2·4
84	108·7	108·3	107·9	107·5	107·1	2·4
85	109·6	109·2	108·8	108·4	108·0	2·4
86	110·4	110·0	109·6	109·2	108·8	2·4
87	111·2	110·8	110·5	110·1	109·7	2·4
88	112·1	111·7	111·3	110·9	110·5	2·4
89	112·9	112·5	112·2	111·8	111·4	2·4
90	113·8	113·4	113·0	112·6	112·2	2·4
91	114·7	114·3	113·9	113·5	113·1	2·4
92	115·6	115·2	114·8	114·4	114·0	2·5
93	116·5	116·1	115·7	115·3	114·9	2·5
94	117·4	117·0	116·6	116·2	115·8	2·5
95	118·3	117·9	117·5	117·1	116·7	2·5
96	119·2	118·8	118·4	118·0	117·6	2·5
97	120·1	119·7	119·3	118·9	118·5	2·5
98	121·0	120·6	120·2	119·8	119·4	2·5
99	121·9	121·5	121·1	120·7	120·3	2·5
100	122·8	122·4	122·0	121·6	121·2	2·5

TRUE PER CENT.

Ind. 101 to 125. Temp. 1° to 5°.

Indication	TEMPERATURES.					Corr. to vol.
	1°	2°	3°	4°	5°	
						Add
101	123·7	123·3	122·9	122·5	122·1	2·5
102	124·6	124·2	123·9	123·5	123·1	2·5
103	125·5	125·1	124·8	124·4	124·0	2·5
104	126·4	126·0	125·7	125·3	124·9	2·6
105	127·3	126·9	126·6	126·2	125·8	2·6
106	128·3	127·9	127·5	127·1	126·7	2·6
107	129·2	128·8	128·4	128·0	127·6	2·6
108	130·1	129·7	129·3	128·9	128·5	2·6
109	131·0	130·6	130·3	129·9	129·5	2·6
110	131·9	131·6	131·2	130·9	130·5	2·6
111	132·8	132·5	132·1	131·8	131·4	2·6
112	133·8	133·4	133·1	132·7	132·3	2·6
113	134·7	134·4	134·0	133·7	133·3	2·6
114	135·6	135·3	134·9	134·6	134·2	2·6
115	136·6	136·2	135·9	135·5	135·2	2·6
116	137·6	137·2	136·9	136·5	136·1	2·7
117	138·5	138·1	137·8	137·4	137·1	2·7
118	139·4	139·0	138·7	138·3	138·0	2·7
119	140·4	140·0	139·7	139·3	139·0	2·7
120	141·3	140·9	140·6	140·2	139·9	2·7
121	142·2	141·9	141·5	141·2	140·9	2·7
122	143·1	142·8	142·4	142·1	141·8	2·7
123	144·1	143·8	143·4	143·1	142·8	2·7
124	145·0	144·7	144·3	144·0	143·7	2·7
125	145·9	145·6	145·3	145·0	144·7	2·7

TRUE PER CENT.

Ind. 126 to 150. Temp. 1° to 5°.

Indication.	TEMPERATURES.					Corr. to vol.
	1°	2°	3°	4°	5°	
						Add
126	146·9	146·6	146·2	145·9	145·6	2·8
127	147·8	147·5	147·1	146·8	146·5	2·8
128	148·7	148·4	148·0	147·7	147·4	2·8
129	149·6	149·3	148·9	148·6	148·3	2·8
130	150·6	150·3	149·9	149·6	149·3	2·8
131	151·5	151·2	150·8	150·5	150·2	2·8
132	152·4	152·1	151·7	151·4	151·1	2·8
133	153·3	153·0	152·6	152·3	152·0	2·8
134	154·2	153·9	153·6	153·3	153·0	2·8
135	155·2	154·9	154·5	154·2	153·9	2·8
136	156·1	155·8	155·4	155·1	154·8	2·8
137	157·1	156·8	156·4	156·1	155·8	2·8
138	158·0	157·7	157·3	157·0	156·7	2·8
139	158·9	158·6	158·2	157·9	157·6	2·9
140	159·8	159·5	159·1	158·8	158·5	2·9
141	160·8	160·5	160·1	159·8	159·5	2·9
142	161·7	161·4	161·0	160·7	160·4	2·9
143	162·6	162·3	161·9	161·6	161·3	2·9
144	163·6	163·2	162·9	162·5	162·2	2·9
145	164·5	164·2	163·8	163·5	163·2	2·9
146	165·3	165·0	164·7	164·4	164·1	2·9
147	166·2	165·9	165·6	165·3	165·0	2·9
148	167·1	166·8	166·5	166·2	165·9	2·9
149	168·0	167·7	167·4	167·1	166·8	2·9
150	168·9	168·6	168·3	168·0	167·7	2·9

TRUE PER CENT.

Ind. 151 to 175 Temp. 1° to 5°.

Indication	TEMPERATURES.					Corr. to vol.
	1°	2°	3°	4°	5°	
						Add
151	169·8	169·5	169·2	168·9	168·6	3·0
152	170·7	170·4	170·1	169·8	169·5	3·0
153	171·6	171·3	171·0	170·7	170·4	3·0
154	172·5	172·2	171·9	171·6	171·3	3·0
155	173·3	173·1	172·8	172·6	172·3	3·0
156	174·2	174·0	173·7	173·5	173·2	3·0
157	175·1	174·9	174·6	174·4	174·1	3·0
158	176·0	175·8	175·5	175·3	175·0	3·0
159	176·9	176·7	176·4	176·2	175·9	3·0
160	177·8	177·6	177·3	177·1	176·8	3·0
161	178·7	178·5	178·2	178·0	177·7	3·0
162	179·6	179·4	179·1	178·9	178·6	3·0
163	180·4	180·2	179·9	179·7	179·4	3·0
164	181·1	181·1	180·8	180·6	180·3	3·0
165	182·1	181·9	181·6	181·4	181·1	3·0
166	183·0	182·8	182·5	182·3	182·0	3·0
167	183·8	183·6	183·3	183·1	182·8	3·1
168	184·7	184·4	184·2	183·9	183·7	3·1
169	185·5	185·3	185·0	184·8	184·5	3·1
170	186·4	186·1	185·9	185·6	185·4	3·1
171	187·2	186·9	186·7	186·4	186·2	3·1
172	188·0	187·8	187·5	187·3	187·0	3·1
173	188·9	188·6	188·4	188·1	187·9	3·1
174	189·7	189·5	189·2	189·0	188·7	3·2
175	190·6	190·3	190·1	189·8	189·6	3·2

TRUE PER CENT.

Ind. 176 to 188. Temp. 1° to 5°.

Indication.	TEMPERATURES.					Corr. to vol.
	1°	2°	3°	4°	5°	
						Add
176	191·4	191·2	190·9	190·7	190·5	3·2
177	192·3	192·0	191·8	191·5	191·3	3·2
178	193·1	192·9	192·6	192·4	192·2	3·2
179	193·9	193·7	193·4	193·2	193·0	3·2
180	194·7	194·5	194·2	194·0	193·8	3·2
181	195·4	195·2	194·9	194·7	194·5	3·2
182	196·2	196·0	195·7	195·5	195·3	3·2
183	196·9	196·7	196·4	196·2	196·0	3·2
184	197·6	197·4	197·2	197·0	196·8	3·2
185	198·3	198·1	197·9	197·7	197·5	3·2
186	199·1	198·9	198·7	198·5	198·3	3·2
187	199·8	199·6	199·5	199·3	199·1	3·2
188	· ·	· ·	· ·	200·0	199·8	3·2

TRUE PER CENT.

Ind. 76 to 100. Temp. 6° to 10°.

Indication.	TEMPERATURES.					Corr. to vol.
	6°	7°	8°	9°	10°	
						Add
76	99·8	99·4	98·9	98·5	98·1	2·1
77	100·7	100·3	99·8	99·4	99·0	2·1
78	101·5	101·1	100·7	100·3	99·9	2·1
79	102·4	102·0	101·6	101·2	100·8	2·1
80	103·2	102·8	102·5	102·1	101·7	2·1
81	104·1	103·7	103·4	103·0	102·6	2·1
82	105·0	104·6	104·3	103·9	103·5	2·1
83	105·8	105·4	105·1	104·7	104·3	2·1
84	106·7	106·3	106·0	105·6	105·2	2·1
85	107·6	107·2	106·9	106·5	106·1	2·2
86	108·4	108·0	107·7	107·3	106·9	2·2
87	109·3	108·9	108·6	108·2	107·8	2·2
88	110·1	109·8	109·4	109·1	108·7	2·2
89	111·0	110·7	110·3	110·0	109·6	2·2
90	111·8	111·5	111·1	110·8	110·4	2·2
91	112·7	112·4	112·0	111·7	111·3	2·2
92	113·6	113·3	112·9	112·6	112·2	2·2
93	114·5	114·2	113·8	113·5	113·1	2·2
94	115·4	115·1	114·7	114·4	114·0	2·2
95	116·3	116·0	115·6	115·3	114·9	2·2
96	117·2	116·9	116·5	116·2	115·8	2·3
97	118·1	117·8	117·4	117·1	116·7	2·3
98	119·0	118·7	118·3	118·0	117·6	2·3
99	119·9	119·6	119·2	118·9	118·5	2·3
100	120·8	120·5	120·1	119·8	119·4	2·3

TRUE PER CENT.

Ind. 101 to 125. Temp. 6° to 10°.

Indication.	TEMPERATURES.					Corr. to vol.
	6°	7°	8°	9°	10°	
						Add
101	121·7	121·4	121·0	120·7	120·3	2·3
102	122·7	122·4	122·0	121·7	121·3	2·3
103	123·6	123·3	122·9	122·6	122·2	2·3
104	124·4	124·1	123·8	123·5	123·1	2·3
105	125·4	125·1	124·7	124·4	124·0	2·3
106	126·3	126·0	125·6	125·3	124·9	2·3
107	127·2	126·9	126·5	126·2	125·8	2·3
108	128·1	127·8	127·4	127·1	126·7	2·3
109	129·1	128·8	128·4	128·1	127·7	2·3
110	130·1	129·8	129·4	129·1	128·7	2·4
111	131·0	130·7	130·3	130·0	129·6	2·4
112	132·0	131·6	131·3	130·9	130·6	2·4
113	132·9	132·6	132·2	131·9	131·5	2·4
114	133·9	133·5	133·2	132·8	132·5	2·4
115	134·9	134·5	134·2	133·8	133·5	2·4
116	135·8	135·4	135·1	134·7	134·4	2·4
117	136·8	136·4	136·1	135·7	135·4	2·4
118	137·7	137·3	137·0	136·6	136·3	2·4
119	138·7	138·3	138·0	137·6	137·3	2·4
120	139·6	139·2	138·9	138·5	138·2	2·4
121	140·6	140·2	139·9	139·5	139·2	2·5
122	141·5	141·1	140·8	140·4	140·1	2·5
123	142·5	142·1	141·8	141·4	141·1	2·5
124	143·4	143·0	142·7	142·3	142·0	2·5
125	144·4	144·0	143·7	143·3	143·0	2·5

TRUE PER CENT.

Ind. 126 to 150. Temp. 6° to 10°.

Indication.	TEMPERATURES.					Corr. to vol.
	6°	7°	8°	9°	10°	
						Add
126	145·3	144·9	144·6	144·2	143·9	2·5
127	146·2	145·8	145·5	145·1	144·8	2·5
128	147·1	146·7	146·4	146·0	145·7	2·5
129	148·0	147·7	147·3	147·0	146·7	2·5
130	149·0	148·6	148·3	147·9	147·6	2·5
131	149·9	149·5	149·2	148·8	148·5	2·5
132	150·8	150·4	150·1	149·7	149·4	2·5
133	151·7	151·4	151·0	150·7	150·4	2·5
134	152·7	152·3	152·0	151·6	151·3	2·6
135	153·6	153·2	152·9	152·5	152·2	2·6
136	154·5	154·1	153·8	153·4	153·1	2·6
137	155·5	155·1	154·8	154·4	154·1	2·6
138	156·4	156·0	155·7	155·3	155·0	2·6
139	157·3	156·9	156·6	156·2	155·9	2·6
140	158·2	157·9	157·5	157·2	156·9	2·6
141	159·2	158·8	158·5	158·1	157·8	2·6
142	160·1	159·7	159·4	159·0	158·7	2·6
143	161·0	160·7	160·3	160·0	159·7	2·6
144	161·9	161·6	161·2	160·9	160·6	2·6
145	162·9	162·6	162·2	161·9	161·6	2·6
146	163·8	163·5	163·1	162·8	162·5	2·6
147	164·7	164·4	164·0	163·7	163·4	2·7
148	165·6	165·3	164·9	164·6	164·3	2·7
149	166·5	166·2	165·9	165·6	165·3	2·7
150	167·4	167·1	166·8	166·5	166·2	2·7

TRUE PER CENT.

Ind. 151 to 175. **Temp. 6° to 10°.**

Indication.	TEMPERATURES.					Corr. to vol.
	6°	7°	8°	9°	10°	
						Add
151	168·3	168·0	167·7	167·4	167·1	2·7
152	169·2	168·9	168.6	168·3	168·0	2·7
153	170·1	169·8	169·5	169·2	168·9	2·7
154	171·0	170·7	170·4	170·1	169·8	2·7
155	172·0	171·7	171·3	171·0	170·7	2·7
156	172·9	172·6	172·2	171·9	171·6	2·7
157	173·8	173·5	173·2	172·9	172·6	2·7
158	174·7	174·4	174·1	173·8	173·5	2·7
159	175·6	175·3	175·0	174·7	174·4	2·7
160	176·5	176·2	175·9	175·6	175·3	2·7
161	177·4	177·1	176·8	176·5	176·2	2·7
162	178·3	178·0	177·7	177·4	177·1	2·7
163	179·1	178·8	178·6	178·3	178·0	2·7
164	180·0	179·7	179·5	179·2	178·9	2·8
165	180·8	180·5	180·3	180·0	179·7	2·8
166	181·7	181·4	181·2	180·9	180·6	2·8
167	182·5	182·3	182·0	181·8	181·5	2·8
168	183·4	183·2	182·9	182·7	182·4	2·8
169	184·2	184·0	183·7	183·5	183·2	2·8
170	185·1	184·9	184·6	184·4	184·1	2·8
171	186·0	185·8	185·5	185·2	185·0	2·8
172	186·8	186·5	186·3	186·0	185·8	2·8
173	187·7	187·4	187·2	186·9	186·7	2·8
174	188·5	188·2	188·0	187·7	187·5	2·8
175	189·4	189·1	188·9	188·6	188·4	2·8

TRUE PER CENT.

Ind. 176 to 189. Temp. 6° to 10°.

Indication.	TEMPERATURES.					Corr. to vol.
	6°	7°	8°	9°	10°	
						Add
176	190·3	190·0	189·8	189·5	189·3	2·8
177	191·1	190·9	190·6	190·4	190·2	2·9
178	192·0	191·8	191·5	191·3	191·1	2·9
179	192·8	192·6	192·3	192·1	191·9	2·9
180	193·6	193·4	193·2	193·0	192·8	2·9
181	194·3	194·1	193·9	193·7	193·5	2·9
182	195·1	194·9	194·7	194·5	194·3	2·9
183	195·8	195·6	195·5	195·3	195·1	2·9
184	196·6	196·4	196·3	196·1	195·9	2·9
185	197·3	197·1	197·0	196·8	196·6	2·9
186	198·1	197·9	197·8	197·6	197·4	2·9
187	198·9	198·7	198·6	198·4	198·2	2·9
188	199·6	199·4	199·3	199·1	198·9	2·9
189	· ·	· ·	· ·	199·9	199·7	2·9

TRUE PER CENT.

Ind. 76 to 100. Temp. 11° to 15°.

Indication.	TEMPERATURES.					Corr. to vol.
	11°	12°	13°	14°	15°	
						Add
76	97·7	97·3	96·8	96·4	95·9	1·8
77	98·6	98·2	97·7	97·3	96·8	1·9
78	99·5	99·1	98·6	98·2	97·7	1·9
79	100·4	100·0	99·5	99·1	98·6	1·9
80	101·3	100·9	100·4	100·0	99·5	1·9
81	102·2	101·8	101·3	100·9	100·5	1·9
82	103·1	102·7	102·2	101·8	101·4	1·9
83	103·9	103·5	103·1	102·7	102·3	1·9
84	104·8	104·4	104·0	103·6	103·2	1·9
85	105·7	105·3	104·9	104·5	104·1	1·9
86	106·5	106·1	105·8	105·4	105·0	1·9
87	107·4	107·0	106·7	106·3	105·9	2·0
88	108·3	107·9	107·6	107·2	106·8	2·0
89	109·2	108·8	108·5	108·1	107·7	2·0
90	110·0	109·7	109·3	109·0	108·6	2·0
91	110·9	110·6	110·2	109·9	109·5	2·0
92	111·8	111·5	111·1	110·8	110·4	2·0
93	112·7	112·4	112·0	111·7	111·3	2·0
94	113·6	113·3	112·9	112·6	112·2	2·0
95	114·5	114·2	113·8	113·5	113·1	2·0
96	115·4	115·1	114·7	114·4	114·0	2·0
97	116·3	116·0	115·6	115·3	114·9	2·0
98	117·2	116·9	116·5	116·2	115·8	2·0
99	118·1	117·8	117·4	117·1	116·7	2·0
100	119·1	118·7	118·4	118·0	117·7	2·1

TRUE PER CENT.

Ind. 101 to 125. Temp. 11° to 15°.

Indication.	TEMPERATURES.					Corr. to vol.
	11°	12°	13°	14°	15°	
						Add
101	120·0	119·6	119·3	118·9	118·6	2·1
102	120·9	120·6	120·2	119·9	119·5	2·1
103	121·8	121·5	121·1	120·8	120·4	2·1
104	122·7	122·4	122·0	121·7	121·3	2·1
105	123·6	123·3	122·9	122·6	122·2	2·1
106	124·5	124·2	123·8	123·5	123·1	2·1
107	125·5	125·1	124·8	124·4	124·1	2·1
108	126·4	126·0	125·7	125·3	125·0	2·1
109	127·4	127·0	126·7	126·3	126·0	2·1
110	128·3	128·0	127·6	127·3	126·9	2·1
111	129·3	128·9	128·6	128·2	127·9	2.1
112	130·3	129·9	129·6	129·2	128·9	2·1
113	131·2	130·8	130·5	130·1	129·8	2·1
114	132·2	131·8	131·5	131·1	130·8	2·2
115	133·2	132·8	132·5	132.1	131·8	2·2
116	134·1	133·7	133·4	133·0	132·7	2·2
117	135·1	134·7	134·4	134·0	133·7	2·2
118	136·0	135·6	135·3	134·9	134·6	2·2
119	137·0	136·6	136·3	135·9	135·6	2·2
120	137·9	137·5	137·2	136·8	136·5	2·2
121	138·9	138·5	138·2	137·8	137·5	2·2
122	139·8	139·5	139·1	138·8	138·5	2·2
123	140·8	140·4	140·1	139·7	139·4	2·2
124	141·7	141·4	141·0	140·7	140·4	2·2
125	142·7	142·3	142·0	141·6	141·3	2·2

TRUE PER CENT.

Ind. 126 to 150. Temp. 11° to 15°.

Indication.	TEMPERATURES.					Corr. to vol.
	11°	12°	13°	14°	15°	
						Add
126	143·6	143·3	142·9	142·6	142·3	2·3
127	144·5	144·2	143·8	143·5	143·2	2·3
128	145·4	145·1	144·7	144·4	144·1	2·3
129	146·4	146·1	145·7	145·4	145·1	2·3
130	147·3	147·0	146·6	146·3	146·0	2·3
131	148·2	147·9	147·5	147·2	146·9	2·3
132	149·1	148·8	148·5	148·2	147·9	2·3
133	150·1	149·8	149·4	149·1	148·8	2·3
134	151·0	150·7	150·3	150·0	149·7	2·3
135	151·9	151·6	151·3	151·0	150·7	2·3
136	152·8	152·5	152·2	151·9	151·6	2·3
137	153·8	153·5	153·2	152·9	152·6	2·3
138	154·7	154·4	154·1	153·8	153·5	2·3
139	155·6	155·3	155·0	154·7	154·4	2·3
140	156·6	156·3	156·0	155·7	155·4	2·3
141	157·5	157·2	156·9	156·6	156·3	2·4
142	158·4	158·1	157·8	157·5	157·2	2·4
143	159·4	159·1	158·8	158·5	158·2	2·4
144	160·3	160·0	159·8	159·5	159·2	2·4
145	161·3	161·0	160·7	160·4	160·1	2·4
146	162·2	161·9	161·6	161·3	161·0	2·4
147	163·1	162·8	162·6	162·3	162·0	2·4
148	164·0	163·7	163·5	163·2	162·9	2·4
149	165·0	164·7	164·5	164·2	163·9	2·4
150	165·9	165·6	165·4	165·1	164·8	2·4

TRUE PEP CENT.

Ind. 151 to 175. Temp. 11° to 15°.

Indication.	TEMPERATURES.					Corr. to vol.
	11°	12°	13°	14°	15°	
						Add
151	166·8	166·5	166·3	166·0	165·7	2·4
152	167·7	167·4	167·2	166·9	166·6	2·4
153	168·6	168·4	168·1	167·9	167·6	2·4
154	169·5	169·3	169·0	168·8	168·5	2·4
155	170·4	170·2	169·9	169·7	169·4	2·4
156	171·3	171·1	170·8	170·6	170·3	2·4
157	172·3	172·1	171·8	171·6	171·3	2·5
158	173·2	173·0	172·7	172·5	172·2	2·5
159	174·1	173·9	173·6	173·4	173·1	2·5
160	175·0	174·8	174·5	174·3	174·0	2·5
161	175·9	175·7	175·4	175·2	174 9	2·5
162	176·8	176·6	176·3	176·1	175·8	2·5
163	177·7	177·5	177·2	177·0	176·7	2·5
164	178·6	178·4	178·1	177·9	177·6	2·5
165	179·4	179·2	178·9	178·7	178·4	2·5
166	180·3	180·1	179·8	179·6	179·3	2·5
167	181·2	181·0	180·7	180·5	180·2	2·5
168	182·1	181·9	181·6	181·4	181·1	2·5
169	182·9	182·7	182·4	182·2	181·9	2·5
170	183·8	183·6	183·3	183·1	182·8	2·5
171	184·7	184·5	184·2	184·0	183·7	2·5
172	185·6	185·3	185·1	184·8	184·6	2·5
173	186·4	186·2	185·9	185·7	185·4	2·5
174	187·3	187·0	186·8	186·5	186·3	2·6
175	188·2	187·9	187·7	187·4	187·2	2·6

TRUE PER CENT.

Ind. 176 to 190. **Temp. 11° to 15°.**

Indication.	TEMPERATURES.					Corr. to vol.
	11°	12°	13°	14°	15°	
						Add
176	189·1	188·8	188·6	188·3	188·1	2·6
177	189·9	189·7	189·4	189·2	188·9	2·6
178	190·8	190·6	190·3	190·1	189·8	2·6
179	191·7	191·4	191·2	190·9	190·7	2·6
180	192·6	192·3	192·1	191·8	191·6	2·6
181	193·3	193·1	192·8	192·6	192·4	2·6
182	194·1	193·9	193·6	193·4	193·2	2·6
183	194·9	194·7	194·4	194·2	194·0	2·6
184	195·7	195·5	195·2	195·0	194·8	2·6
185	196·4	196·2	196·0	195·8	195·6	2·6
186	197·2	197·0	196·8	196·6	196·4	2·6
187	198·0	197·8	197·6	197·4	197·2	2·6
188	198·7	198·5	198·3	198·1	197·9	2·6
189	199·5	199·3	199·1	198·9	198·7	2·6
190	· ·	· ·	199·9	199·7	199·5	2·6

TRUE PER CENT.

Ind. 76 to 100. Temp. 16° to 20°.

Indication.	TEMPERATURES.					Corr. to vol.
	16°	17°	18°	19°	20°	
						Add
76	95·5	95·1	94·6	94·2	93·8	1·6
77	96·4	96·0	95·5	95·1	94·7	1·6
78	97·3	96·9	96·4	96·0	95·6	1·6
79	98·2	97·8	97·3	96·9	96·5	1·7
80	99·1	98·7	98·2	97·8	97·4	1·7
81	100·1	99·6	99·2	98·7	98·3	1·7
82	101·0	100·5	100·1	99·6	99·2	1·7
83	101·9	101·5	101·0	100·6	100·2	1·7
84	102·8	102·4	101·9	101·5	101·1	1·7
85	103·7	103·3	102·8	102·4	102·0	1·7
86	104·6	104·2	103·7	103·3	102·9	1·7
87	105·5	105·1	104·6	104·2	103·8	1·7
88	106·4	106·0	105·5	105·1	104·7	1·7
89	107·3	106·9	106·4	106·0	105·6	1·7
90	108·2	107·8	107·3	106·9	106·5	1·7
91	109·1	108·7	108·2	107·8	107·4	1·8
92	110·0	109·6	109·1	108·7	108·3	1·8
93	110·9	110·5	110·0	109·6	109·2	1·8
94	111·8	111·4	111·0	110·6	110·2	1·8
95	112·7	112·3	111·9	111·5	111·1	1·8
96	113·6	113·2	112·8	112·4	112·0	1·8
97	114·5	114·1	113·7	113·3	112·9	1·8
98	115·4	115·0	114·7	114·3	113·9	1·8
99	116·3	115·9	115·6	115·2	114·8	1·8
100	117·3	116·9	116·5	116·1	115·7	1·8

TRUE PER CENT.

Ind. 101 to 125. Temp. 16° to 20°.

Indication.	TEMPERATURES.					Corr. to vol.
	16°	17°	18°	19°	20°	
						Add
101	118·2	117·8	117·5	117·1	116·7	1·8
102	119·1	118·7	118·4	118·0	117·6	1·8
103	120·0	119·6	119·3	118·9	118·5	1·8
104	120·9	120·5	120·2	119·8	119·4	1·8
105	121·8	121·4	121·1	120·7	120·3	1·8
106	122·7	122·4	122·0	121·7	121·3	1·9
107	123·7	123·3	123·0	122·6	122·2	1·9
108	124·6	124·2	123·9	123·5	123·1	1·9
109	125·6	125·2	124·9	124·5	124·1	1·9
110	126·5	126·1	125·8	125·4	125·0	1·9
111	127·5	127·1	126·8	126·4	126·0	1·9
112	128·5	128·1	127·8	127·4	127·0	1·9
113	129·4	129·0	128·7	128·3	127·9	1·9
114	130·4	130·0	129·7	129·3	128·9	1·9
115	131·4	131·0	130·7	130·3	129·9	1·9
116	132·3	132·0	131·6	131·3	130·9	1·9
117	133·3	132·9	132·6	132·2	131·8	1·9
118	134·2	133·9	133·5	133·2	132·8	1·9
119	135·2	134·9	134·5	134·2	133·8	1·9
120	136·1	135·8	135·4	135·1	134·7	1·9
121	137·1	136·8	136·4	136·1	135·7	1·9
122	138·1	137·8	137·4	137·1	136·7	2·0
123	139·0	138·7	138·3	138·0	137·6	2·0
124	140·0	139·7	139·3	139·0	138·6	2·0
125	141·0	140·6	140·3	139·9	139·6	2·0

TRUE PER CENT.

Ind. 126 to 150. Temp 16° to 20°.

Indication.	TEMPERATURES.					Corr. to vol.
	16°	17°	18°	19°	20°	
						Add
126	141·9	141·6	141·2	140·9	140·5	2·0
127	142·8	142·5	142·1	141·8	141·4	2·0
128	143·8	143·4	143·1	142·7	142·4	2·0
129	144·7	144·4	144·0	143·7	143·3	2·0
130	145·6	145·3	144·9	144·6	144·2	2·0
131	146·6	146·2	145·9	145·5	145·2	2·0
132	147·5	147·2	146·8	146·5	146·1	2·0
133	148·5	148·1	147·8	147·4	147·1	2·0
134	149·4	149·0	148·7	148·3	148·0	2·0
135	150·4	150·0	149·7	149·3	149·0	2·0
136	151·3	150·9	150·6	150·2	149·9	2·1
137	152·3	151·9	151·6	151·2	150·9	2·1
138	153·2	152·8	152·5	152·1	151·8	2·1
139	154·1	153·7	153·4	153·0	152·7	2·1
140	155·1	154·7	154·4	154·0	153·7	2·1
141	156·0	155·6	155·3	154·9	154·6	2·1
142	156·9	156·6	156·2	155·9	155·6	2·1
143	157·9	157·5	157·2	156·8	156·5	2·1
144	158·9	158·5	158·2	157·8	157·5	2·1
145	159·8	159·4	159·1	158·7	158·4	2·1
146	160·7	160·4	160·0	159·7	159·4	2·1
147	161·7	161·3	161·0	160·6	160·3	2·1
148	162·6	162·3	161·9	161·6	161·3	2·1
149	163·6	163·2	162·9	162·5	162·2	2·1
150	164·5	164·2	163·8	163·5	163·2	2·1

TRUE PER CENT.

Ind. 151 to 175. Temp. 16° to 20°.

Indication.	TEMPERATURES.					Corr. to vol.
	16°	17°	18°	19°	20°	
						Add
151	165·4	165·1	164·7	164·4	164·1	2·2
152	166·3	166·0	165·7	165·4	165·1	2·2
153	167·3	167·0	166·6	166·3	166·0	2·2
154	168·2	167·9	167·5	167·2	166·9	2·2
155	169·1	168·8	168·5	168·2	167·9	2·2
156	170·0	169·7	169·4	169·1	168·8	2·2
157	171·0	170·7	170·4	170·1	169·8	2·2
158	171·9	171·6	171·3	171·0	170·7	2·2
159	172·8	172·5	172·2	171·9	171·6	2·2
160	173·7	173·4	173·2	172·9	172·6	2·2
161	174·6	174·3	174·1	173·8	173·5	2·2
162	175·5	175·2	175·0	174·7	174·4	2·2
163	176·4	176·1	175·9	175·6	175·3	2·2
164	177·3	177·0	176·8	176·5	176·2	2·2
165	178·1	177·9	177·6	177·4	177·1	2·2
166	179·0	178·8	178·5	178·3	178·0	2·2
167	179·9	179·7	179·4	179·2	178·9	2·2
168	180·8	180·5	180·3	180·0	179·8	2·2
169	181·7	181·4	181·2	180·9	180·7	2·2
170	182·5	182·3	182·0	181·8	181·5	2·2
171	183·4	183·2	182·9	182·7	182·4	2·2
172	184·3	184·1	183·8	183·6	183·3	2·2
173	185·2	184·9	184·7	184·4	184·2	2·3
174	186·1	185·8	185·6	185·3	185·1	2·3
175	187·0	186·7	186·5	186·2	186·0	2·3

TRUE PER CENT.

Ind. 176 to 191. Temp. 16° to 20°.

Indication.	TEMPERATURES.					Corr. to vol.
	16°	17°	18°	19°	20°	
						Add
176	187·8	187·6	187·3	187·1	186·8	2·3
177	188·7	188·4	188·2	187·9	187·7	2·3
178	189·6	189·3	189·1	188·8	188·6	2·3
179	190·5	190·2	190·0	189·7	189·5	2·3
180	191·4	191·1	190·9	190·6	190·4	2·3
181	192·2	192·0	191·7	191·5	191·3	2·3
182	193·0	192·8	192·5	192·3	192·1	2·3
183	193·8	193·6	193·3	193·1	192·9	2·3
184	194·6	194·4	194·1	193·9	193·7	2·3
185	195·4	195·2	194·9	194·7	194·5	2·3
186	196·2	196·0	195·8	195·6	195·4	2·3
187	197·0	196·8	196·6	196·4	196·2	2·3
188	197·7	197·5	197·4	197·2	197·0	2·3
189	198·5	198·3	198·2	198·0	197·8	2·3
190	199·3	199·1	199·0	198·8	198·6	2·3
191	· ·	199·9	199·8	199·7	199·5	2·3

TRUE PER CENT.

Ind. 76 to 100. Temp. 21° to 25°.

Indication.	TEMPERATURES.					Corr. to vol.
	21°	22°	23°	24°	25°	
						Add
76	93·4	93·0	92·5	92·1	91·7	1·4
77	94·2	93·8	93·4	93·0	92·6	1·4
78	95·2	94·8	94·4	94·0	93·6	1·4
79	96·1	95·7	95·3	94·9	94·5	1·4
80	97·0	96·6	96·2	95·8	95·4	1·4
81	97·9	97·5	97·1	96·7	96·3	1·5
82	98·8	98·4	98·0	97·6	97·2	1·5
83	99·8	99·4	98·9	98·5	98·1	1·5
84	100·7	100·3	99·8	99·4	99·0	1·5
85	101·6	101·2	100·7	100·3	99·9	1·5
86	102·5	102·1	101·7	101·3	100·9	1·5
87	103·4	103·0	102·6	102·2	101·8	1·5
88	104·3	103·9	103·5	103·1	102·7	1·5
89	105·2	104·8	104·4	104·0	103·6	1·5
90	106·1	105·7	105·3	104·9	104·5	1·5
91	107·0	106·6	106·2	105·8	105·4	1·5
92	107·9	107·5	107·1	106·7	106·3	1·5
93	108·8	108·4	108·1	107·7	107·3	1·5
94	109·8	109·4	109·0	108·6	108·2	1·5
95	110·7	110·3	109·9	109·5	109·1	1·5
96	111·6	111·2	110·9	110·5	110·1	1·6
97	112·5	112·1	111·8	111·4	111·0	1·6
98	113·5	113·1	112·7	112·3	111·9	1·6
99	114·4	114·0	113·7	113·3	112·9	1·6
100	115·3	114·9	114·6	114·2	113 8	1·6

TRUE PER CENT.

Ind. 101 to 125. Temp. 21° to 25°.

Indication.	TEMPERATURES.					Corr. to vol.
	21°	22°	23°	24°	25°	
						Add
101	116·3	115·9	115·5	115·1	114·7	1·6
102	117·2	116·8	116·5	116·1	115·7	1·6
103	118·1	117·7	117·4	117·0	116·6	1·6
104	119·0	118·6	118·3	117·9	117·5	1·6
105	119·9	119·6	119·2	118·9	118·5	1·6
106	120·9	120·5	120·2	119·8	119·4	1·6
107	121·8	121·5	121·1	120·8	120·4	1·6
108	122·7	122·4	122·0	121·7	121·3	1·6
109	123·7	123·4	123·0	122·7	122·3	1·6
110	124·6	124·3	123·9	123·6	123·2	1·6
111	125·6	125·3	124·9	124·6	124·2	1·6
112	126·6	126·3	125·9	125·6	125·2	1·7
113	127·5	127·2	126·8	126·5	126·1	1·7
114	128·5	128·2	127·8	127·5	127·1	1·7
115	129·5	129·[illegible]	128·8	128·5	128·1	1·7
116	130·5	130·[illegible]	129·8	129·5	129·1	1·7
117	131·4	131·1	130·7	130·4	130·0	1·7
118	132·4	132·1	131·7	131·4	131·0	1·7
119	133·4	133·1	132·7	132·4	132·0	1·7
120	134·3	134·0	133·6	133·3	132·9	1·7
121	135·3	135·0	134·6	134·3	133·9	1·7
122	136·3	135·9	135·6	135·2	134·8	1·7
123	137·2	136·9	136·5	136·2	135·8	1·7
124	138·2	137·9	137·5	137·2	136·8	1·7
125	139·2	138·8	138·5	138·1	137·7	1·7

TRUE PER CENT.

Ind. 126 to 150. Temp. 21° to 25°.

Indication.	TEMPERATURES.					Corr. to vol.
	21°	22°	23°	24°	25°	
						Add
126	140·1	139·8	139·4	139·1	138·7	1·7
127	141·0	140·7	140·3	140·0	139·6	1·7
128	142·0	141·7	141·3	141·0	140·6	1·7
129	142·9	142·6	142·2	141·9	141·5	1·8
130	143·9	143·5	143·2	142·8	142·5	1·8
131	144·9	144·5	144·2	143·8	143·5	1·8
132	145·8	145·4	145·1	144·7	144·4	1·8
133	146·8	146·4	146·1	145·7	145·4	1·8
134	147·7	147·3	147·0	146·6	146·3	1·8
135	148·7	148·3	148·0	147·6	147·3	1·8
136	149·6	149·2	148·9	148·5	148·2	1·8
137	150·6	150·2	149·9	149·5	149·2	1·8
138	151·5	151·1	150·8	150·4	150·1	1·8
139	152·4	152·1	151·7	151·4	151·1	1·8
140	153·4	153·0	152·7	152·3	152·0	1·8
141	154·3	154·0	153·6	153·3	153·0	1·8
142	155·3	155·0	154·6	154·3	154·0	1·8
143	156·2	155·9	155·5	155·2	154·9	1·8
144	157·2	156·9	156·5	156·2	155·9	1·8
145	158·1	157·8	157·5	157·2	156·9	1·8
146	159·1	158·8	158·4	158·1	157·8	1·8
147	160·0	159·7	159·4	159·1	158·8	1·8
148	161·0	160·7	160·3	160·0	159·7	1·9
149	161·9	161·6	161·3	161·0	160·7	1·9
150	162·8	162·5	162·2	161·9	161·6	1·9

TRUE PER CENT.

Ind. 151 to 175. Temp. 21° to 25°.

Indication.	TEMPERATURES.					Corr. to vol.
	21°	22°	23°	24°	25°	
						Add
151	163·8	163·5	163·1	162·8	162·5	1·9
152	164·8	164·5	164·1	163·8	163·5	1·9
153	165·7	165·4	165 0	164·7	164·4	1·9
154	166·6	166·3	166·0	165·7	165·4	1·9
155	167·6	167·3	166·9	166·6	166·3	1·9
156	168·5	168·2	167·9	167·6	167·3	1·9
157	169·5	169·2	168·8	168·5	168·2	1·9
158	170·4	170·1	169·8	169·5	169·2	1·9
159	171·3	171:0	170·7	170·4	170·1	1·9
160	172·3	172·0	171·7	171·4	171·1	1·9
161	173·2	172·9	172·6	172·3	172·0	1·9
162	174·1	173·8	173·5	173·2	172·9	1·9
163	175·0	174·7	174·4	174·1	173·8	1·9
164	175·9	175·6	175·3	175·0	174·7	1·9
165	176·8	176·5	176·3	176·0	175·7	1·9
166	177·7	177·4	177·2	176·9	176·6	1·9
167	178·6	178·3	178·1	177·8	177·5	1·9
168	179·5	179·2	179·0	178·7	178·4	2·0
169	180·4	180·1	179·9	179·6	179·3	2·0
170	181·2	181·0	180·7	180·5	180·2	2·0
171	182·1	181·9	181·6	181·4	181·1	2·0
172	183·0	182·8	182·5	182·3	182·0	2·0
173	183·9	183·7	183·4	183·2	182·9	2·0
174	184·8	184·6	184·3	184·1	183·8	2·0
175	185·7	185·5	185·2	185·0	184·7	2·0

TRUE PER CENT.

Ind. 176 to 192. Temp 21° to 25°.

Indication.	TEMPERATURES.					Corr. to vol.
	21°	22°	23°	24°	25°	
						Add
176	186·6	186·3	186·1	185·8	185·6	2·0
177	187·5	187·2	187·0	186·7	186·5	2·0
178	188·4	188·1	187·9	187·6	187·4	2·0
179	189·3	189·0	188·8	188·5	188·3	2·0
180	190·2	189·9	189·7	189·4	189·2	2·0
181	191·1	190·8	190·6	190·3	190·1	2·0
182	191·9	191·6	191·4	191·1	190·9	2·0
183	192·7	192·5	192·2	192·0	191·8	2·0
184	193·5	193·3	193·0	192·8	192·6	2·0
185	194·3	194·1	193·9	193·7	193·5	2·0
186	195·2	195·0	194·7	194·5	194·3	2·0
187	196·0	195·8	195·6	195·4	195·2	2·0
188	196·8	196·6	196·4	196·2	196·0	2·0
189	197·6	197·4	197·3	197·1	196·9	2·0
190	198·4	198·2	198·1	197·9	197·7	2·0
191	199·3	199·1	199·0	198·8	198·6	2·0
192	· ·	199·9	199·7	199·6	199·4	2·0

TRUE PER CENT.

Ind. 76 to 100. Temp. 26° to 30°.

Indication.	TEMPERATURES.					Corr. to vol.
	26°	27°	28°	29°	30°	
						Add
76	91·3	90·8	90·3	89·9	89·4	1·2
77	92·2	91·7	91·2	90·8	90·3	1·2
78	93·2	92·7	92·2	91·8	91·3	1·2
79	94·1	93·6	93·1	92·7	92·2	1·2
80	95·0	94·5	94·0	93·6	93·1	1·2
81	95·9	95·5	95·0	94·6	94·1	1·2
82	96·8	96·4	95·9	95·5	95·0	1·2
83	97·7	97·3	96·8	96·4	95·9	1·2
84	98·6	98·2	97·7	97·3	96·8	1·2
85	99·5	99·1	98.6	98·2	97·8	1·3
86	100·5	100·1	99·6	99·2	98·7	1·3
87	101·4	101·0	100·5	100·1	99·7	1·3
88	102·3	101·9	101·5	101·1	100·7	1·3
89	103·2	102·8	102·4	102·0	101·6	1·3
90	104·1	103·7	103·3	102·9	102·5	1·3
91	105·0	104·6	104·3	103·9	103·5	1·3
92	105·9	105·5	105·2	104·8	104·4	1·3
93	106·9	106·5	106·2	105·8	105·4	1·3
94	107·8	107·4	107·1	106·7	106·3	1·3
95	108·7	108·3	108·0	107·6	107·2	1·3
96	109·7	109·3	108·9	108·5	108·1	1·3
97	110·6	110·2	109·9	109·5	109·1	1·3
98	111·5	111·1	110·8	110·4	110·0	1·3
99	112·5	112·1	111·8	111·4	111·0	1·3
100	113·4	113·0	112·7	112·3	111·9	1·4

TRUE PER CENT.

Ind. 101 to 125. Temp. 26° to 30°.

Indication.	TEMPERATURES.					Corr. to vol.
	26°	27°	28°	29°	30°	
						Add
101	114·3	113·9	113·6	113·2	112·8	1·4
102	115·3	114·9	114·6	114·2	113·8	1·4
103	116·2	115·8	115·5	115·1	114·7	1·4
104	117·1	116·8	116·4	116·1	115·7	1·4
105	118·1	117·8	117·4	117·1	116·7	1·4
106	119·0	118·7	118·3	118·0	117·6	1·4
107	120·0	119·7	119·3	119·0	118·6	1·4
108	120·9	120·6	120·2	119·9	119·5	1·4
109	121·9	121·6	121·2	120·9	120·5	1·4
110	122·8	122·5	122·1	121·8	121·4	1·4
111	123·8	123·5	123·1	122·8	122·4	1·4
112	124·8	124·5	124·1	123·8	123·4	1·4
113	125·8	125·4	125·1	124·7	124·4	1·4
114	126·7	126·4	126·0	125·7	125·3	1·4
115	127·7	127·4	127·0	126·7	126·3	1·4
116	128·7	128·4	128·0	127·7	127·3	1·4
117	129·6	129·3	128·9	128·6	128·2	1·4
118	130·6	130·3	129·9	129·6	129·2	1·4
119	131·6	131·3	130·9	130·6	130·2	1·4
120	132·6	132·2	131·9	131·5	131·2	1·5
121	133·5	133·2	132·8	132·5	132·1	1·5
122	134·5	134·1	133·8	133·4	133·1	1·5
123	135·5	135·1	134·8	134·4	134·1	1·5
124	136·5	136·1	135·8	135·4	135·1	1·5
125	137·4	137·0	136·7	136·3	136·0	1·5

TRUE PER CENT.

Ind. 126 to 150. Temp. 26° to 30°.

Indication.	TEMPERATURES.					Corr. to vol.
	26°	27°	28°	29°	30°	
						Add
126	138·3	138·0	137·6	137·3	136·9	1·5
127	139·2	138·9	138·6	138·2	137·9	1·5
128	140·2	139·9	139·5	139·2	138·8	1·5
129	141·2	140·8	140·5	140·1	139·8	1·5
130	142·1	141·8	141·4	141·1	140·7	1·5
131	143·1	142·8	142·4	142·1	141·7	1·5
132	144·1	143·7	143·3	143·0	142·6	1·5
133	145·1	144·7	144·3	144·0	143·6	1·5
134	146·0	145·6	145·3	144·9	144·6	1·5
135	146·9	146·6	146·2	145·9	145·5	1·5
136	147·9	147·5	147·2	146·8	146·5	1·5
137	148·8	148·5	148·1	147·8	147·4	1·5
138	149·8	149·4	149·1	148·7	148·4	1·5
139	150·7	150·4	150·0	149·7	149·3	1·5
140	151·7	151·3	151·0	150·6	150·3	1·5
141	152·7	152·3	152·0	151·6	151·3	1·5
142	153·7	153·3	153·0	152·6	152·3	1·5
143	154·6	154·2	153·9	153·5	153·2	1·5
144	155·6	155·2	154·9	145·5	154·2	1·6
145	156·6	156·2	155·8	155·5	155·1	1·6
146	157·5	157·1	156·8	156·4	156·1	1·6
147	158·5	158·1	157·8	157·4	157·1	1·6
148	159·4	159·0	158·7	158·3	158·0	1·6
149	160·4	160·0	159·7	159·3	159·0	1·6
150	161·3	160·9	160·6	160·2	159·9	1·6

TRUE PER CENT.

Ind. 151 to 175. Temp. 26° to 30°

Indication.	TEMPERATURES.					Corr. to vol.
	26°	27°	28°	29°	30°	
						Add
151	162·2	161·9	161·5	161·2	160·9	1·6
152	163·2	162·9	162·5	162·2	161·9	1·6
153	164·1	163·8	163·4	163·1	162·8	1·6
154	165·1	164·8	164·4	164·1	163·8	1·6
155	166·0	165·7	165·4	165·1	164·8	1·6
156	167·0	166·7	166·3	166·0	165·7	1·6
157	167·9	167·6	167·3	167·0	166·7	1·6
158	168·9	168·6	168·3	168·0	167·7	1·6
159	169·8	169·5	169·2	168·9	168·6	1·6
160	170·8	170·5	170·1	169·8	169·5	1·6
161	171·7	171·4	171·0	170·7	170·4	1·6
162	172·6	172·3	172·0	171·7	171·4	1·6
163	173·5	173·2	172·9	172·6	172·3	1·6
164	174·4	174·1	173·8	173·5	173·2	1·6
165	175·4	175·1	174·7	174·4	174·1	1·7
166	176·3	176·0	175·7	175·4	175·1	1·7
167	177·2	176·9	176·6	176·3	176·0	1·7
168	178·1	177·8	177·5	177·2	176·9	1·7
169	179·0	178·7	178·5	178·2	177·9	1·7
170	179·9	179·6	179·4	179·1	178·8	1·7
171	180·8	180·5	180·3	180·0	179·7	1·7
172	181·7	181·4	181·2	180·9	180·6	1·7
173	182·6	182·3	182·1	181·8	181·5	1·7
174	183·5	183·2	183·0	182·7	182·4	1·7
175	184·4	184·1	183·9	183·6	183·3	1·7

TRUE PER CENT.

Ind. 176 to 193. Temp. 26° to 30°.

Indication.	TEMPERATURES.					Corr. to vol.
	26°	27°	28°	29°	30°	
						Add
176	185·3	185·0	184·8	184·5	184·2	1·7
177	186·2	186·0	185·7	185·5	185·2	1·7
178	187·1	186·9	186·6	186·4	186·1	1·7
179	188·0	187·8	187·5	187·3	187·0	1·7
180	188·9	188·6	188·4	188·1	187·8	1·7
181	189·8	189·5	189·3	189·0	188·7	1·7
182	190·6	190·4	190·1	189·9	189.6	1·7
183	191·5	191·3	191·0	190·8	190·5	1·7
184	192·3	192·1	191·8	191·6	191·3	1·7
185	193·2	193·0	192·7	192·5	192·2	1·7
186	194·0	193·8	193·5	193·3	193·0	1·7
187	194·9	194·7	194·4	194·2	193·9	1·7
188	195·8	195·5	195·3	195·0	194·8	1·7
189	196·6	196·4	196·1	195·9	195·6	1·7
190	197·6	197·3	197·1	196·8	196·5	1·7
191	198·4	198·1	197·9	197·6	197·4	1·7
192	199·2	199·0	198·7	198·5	198·3	1·7
193	· ·	199·9	199·6	199·4	199·2	1·7

TRUE PER CENT.

Ind. 1 to 25. Temp. 31° to 35°.

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
1	1·7	1·7	1·8	1·8	1·9	0·1
2	2·7	2·7	2·8	2·8	2·9	0·1
3	3·7	3·7	3·8	3·8	3·9	0·1
4	4·7	4·7	4·8	4·8	4·9	0·1
5	5·7	5·7	5·8	5·8	5·9	0·1
6	6·7	6·8	6·8	6·9	6·9	0·1
7	7·7	7·8	7·8	7·9	7·9	0·1
8	8·8	8·8	8·9	8·9	9·0	0·1
9	9·8	9·8	9·9	9·9	10·0	0·1
10	10·9	10·9	11·0	11·0	11·1	0·1
11	12·0	12·0	12·1	12·1	12·2	0·1
12	13·1	13·2	13·2	13·3	13·3	0·1
13	14·2	14·3	14·3	14·4	14·4	0·1
14	15·3	15·4	15·4	15·5	15·5	0·1
15	16·4	16·5	16·5	16·6	16·6	0·1
16	17·5	17·6	17·6	17·7	17·7	0·1
17	18·6	18·7	18·7	18·8	18·8	0·1
18	19·7	19·8	19·8	19·9	19·9	0·2
19	21·0	21·0	21·1	21·1	21·1	0·2
20	22·3	22·3	22·4	22·4	22·4	0·2
21	23·6	23·6	23·6	23·6	23·6	0·2
22	24·8	24·8	24·8	24·8	24·8	0·2
23	26·0	26·0	25·9	25·9	25·9	0·2
24	27·2	27·2	27·1	27·1	27·1	0·2
25	28·4	28·3	28·3	28·2	28·2	0·2

TRUE PER CENT.

Ind. 26 to 50. Temp. 31° to 35°.

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
26	29·7	29·7	29·6	29·6	29·5	0·2
27	31·2	31·1	31·1	31·0	30·9	0·3
28	32·6	32·5	32·4	32·3	32·2	0·3
29	34·0	33·9	33·8	33·7	33·6	0·3
30	35·4	35·2	35·1	34·9	34·8	0·3
31	36·7	36·6	36·4	36·3	36·1	0·3
32	38·3	38·1	38·0	37·8	37·6	0·3
33	39·9	39·7	39·4	39·2	39·0	0·4
34	41·4	41·2	40·9	40·7	40·4	0·4
35	42·9	42·7	42·4	42·2	41·9	0·4
36	44·4	44·1	43·9	43·6	43·3	0·4
37	45·8	45·5	45·2	44·9	44·6	0·4
38	47·1	46·8	46·5	46·2	45·9	0·5
39	48·5	48·2	47·8	47·5	47·2	0·5
40	49·9	49·5	49·2	48·8	48·5	0·5
41	51·2	50·8	50·5	50·1	49·7	0·5
42	52·6	52·2	51·8	51·4	51·0	0·5
43	54·0	53·6	53·1	52·7	52·3	0·5
44	55·4	54·9	54·5	54·0	53·6	0·6
45	56·7	56·3	55·8	55·4	54·9	0·6
46	58·1	57·6	57·2	56·7	56·2	0·6
47	59·4	58·9	58·4	57·9	57·4	0·6
48	60·7	60·2	59·7	59·2	58·7	0·6
49	61·9	61·4	60·9	60·4	59·9	0·6
50	63·1	62·6	62·2	61·7	61·3	0·7

TRUE PER CENT.

Ind. 51 to 75. Temp. 31° to 35°

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
51	64·2	63·8	63·3	62·9	62·4	0·7
52	65·3	64·9	64·4	64·0	63·5	0·7
53	66·4	65·9	65·5	65·0	64·5	0·7
54	67·5	67·0	66·5	66·0	65·5	0·7
55	68·6	68·1	67·6	67·1	66·6	0·8
56	69·6	69·1	68·6	68·1	67·6	0·8
57	70·6	70·1	69·7	69·2	68·7	0·8
58	71·7	71·2	70·7	70·2	69·7	0·8
59	72·8	72·3	71·7	71·2	70·7	0·8
60	73·9	73·4	72·8	72·3	71·8	0·8
61	74·9	74·4	73·8	73·3	72·8	0·8
62	75·9	75·4	74·8	74·3	73·8	0·9
63	76·8	76·3	75·9	75·4	74·9	0·9
64	77·7	77·3	76·8	76·4	75·9	0·9
65	78·7	78·2	77·8	77·3	76·9	0·9
66	79·6	79·2	78·7	78·3	77·8	0·9
67	80·5	80·1	79·6	79·2	78·7	0·9
68	81·5	81·0	80·6	80·1	79·7	0·9
69	82·4	81·9	81·5	81·0	80·6	0·9
70	83·3	82·9	82·4	82·0	81·5	0·9
71	84·3	83·8	83·4	82·9	82·5	0·9
72	85·2	84·7	84·3	83·8	83·4	0·9
73	86·1	85·7	85·2	84·8	84·4	0·9
74	87·1	86·6	86·2	85·7	85·3	1·0
75	88·0	87·6	87·1	86·7	86·3	1·0

TRUE PER CENT.

Ind. 76 to 100. Temp. 31° to 35°.

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
76	89·0	88·5	88·1	87·6	87·2	1·0
77	89·9	89·4	89·0	88·5	88·1	1·0
78	90·9	90·4	90·0	89·5	89·1	1·0
79	91·8	91·3	90·9	90·4	90·0	1·0
80	92·7	92·3	91·8	91·4	91·0	1·0
81	93·7	93·2	92·8	92·3	91·9	1·0
82	94·6	94·2	93·7	93·3	92·9	1·0
83	95·5	95·1	94·7	94·3	93·9	1·0
84	96·4	96·0	95·6	95·2	94·8	1·0
85	97·4	97·0	96·5	96·1	95·7	1·0
86	98·3	97·9	97·5	97·1	96·7	1·0
87	99·3	98·9	98·4	98·0	97·6	1·1
88	100·3	99·9	99·4	99·0	98·6	1·1
89	101·2	100·8	100·3	99·9	99·5	1·1
90	102·1	101·7	101·3	100·9	100·5	1·1
91	103·1	102·7	102·2	101·8	101·4	1·1
92	104·0	103·6	103·2	102·8	102·4	1·1
93	105·0	104·6	104·1	103·7	103·3	1·1
94	105·9	105·5	105·1	104·7	104·3	1·1
95	106·8	106·4	106·1	105·7	105·3	1·1
96	107·7	107·3	107·0	106·6	106·2	1·1
97	108·7	108·3	108·0	107·6	107·2	1·1
98	109·6	109·2	108·9	108·5	108·1	1·1
99	110·6	110·2	109·8	109·4	109·0	1·1
100	111·5	111·1	110·8	110·4	110·0	1·1

TRUE PER CENT.

Ind. 101 to 125. Temp. 31° to 35°.

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
101	112·4	112·0	111·7	111·3	110·9	1·1
102	113·4	113·0	112·7	112·3	111·9	1·1
103	114·3	114·0	113·6	113·3	112·9	1·1
104	115·3	114·9	114·6	14·2	113·8	1·1
105	116·3	115·9	115·6	15·2	114·8	1·1
106	117·2	116·8	116·5	116·1	115·7	1·2
107	118·2	117·8	117·5	117·1	116·7	1·2
108	119·1	118·8	118·4	118·1	117·7	1·2
109	120·1	119·8	119·4	119·1	118·7	1·2
110	121·0	120·7	120·3	120·0	119·6	1·2
111	122·0	121·7	121·3	121·0	120·6	1·2
112	123·0	122·6	122·3	121·9	121·5	1·2
113	124·0	123·6	123·3	122·9	122·5	1·2
114	124·9	124·6	124·2	123·9	123·5	1·2
115	125·9	125·6	125·2	124·9	124·5	1·2
116	126·9	126·5	126·2	125·8	125·4	1·2
117	127·8	127·5	127·1	126·8	126·4	1·2
118	128·8	128·5	128·1	127·8	127·4	1·2
119	129·8	129·4	129·1	128·7	128·3	1·2
120	130·8	130·4	130·1	129·7	129·3	1·2
121	131·7	131·4	131·0	130·7	130·3	1·2
122	132·7	132·4	132·0	131·7	131·3	1·2
123	133·7	133·4	133·0	132·7	132·3	1·2
124	134·7	134·4	134·0	133·7	133·3	1·2
125	135·7	135·3	135·0	134·6	134·3	1·2

TRUE PER CENT.

Ind. 126 to 150. Temp. 31° to 35°

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
126	136·6	136·2	135·9	135·5	135·2	1·2
127	137·5	137·2	136·8	136·5	136·1	1·2
128	138·5	138·1	137·8	137·4	137·1	1·2
129	139·5	139·1	138·8	138·4	138·1	1·2
130	140·4	140·0	139·7	139·3	139·0	1·2
131	141·4	141·0	140·7	140·3	140·0	1·3
132	142·3	141·9	141·6	141·2	140·9	1·3
133	143·3	142·9	142·6	142·2	141·9	1·3
134	144·2	143·9	143·5	143·2	142·8	1·3
135	145·2	144·8	144·5	144·1	143·8	1·3
136	146·2	145·8	145·5	145·1	144·8	1·3
137	147·1	146·8	146·4	146·1	145·8	1·3
138	148·1	147·7	147·4	147·0	146·7	1·3
139	149·0	148·7	148·3	148·0	147·7	1·3
140	150·0	149·7	149·3	149·0	148·7	1·3
141	151·0	150·6	150·3	149·9	149·6	1·3
142	152·0	151·6	151·3	150·9	150·6	1·3
143	152·9	152·5	152·2	151·8	151·5	1·3
144	153·9	153·5	153·2	152·8	152·5	1·3
145	154·8	154·5	154·1	153·8	153·5	1·3
146	155·8	155·5	155·1	154·8	154·5	1·3
147	156·8	156·4	156·1	155·7	155·4	1·3
148	157·7	157·4	157·0	156·7	156·4	1·3
149	158·7	158·4	158·0	157·7	157·4	1·3
150	159·6	159·3	158·9	158·6	158·3	1·3

TRUE PER CENT.

Ind. 151 to 175. Temp. 31° to 35°

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
151	160·6	160·3	159·9	159·6	159·3	1·3
152	161·6	161·3	160·9	160·6	160·3	1·3
153	162·5	162·2	161·8	161·5	161·2	1·3
154	163·5	163·2	162·8	162·5	162·2	1·3
155	164·5	164·2	163·8	163·5	163·2	1·3
156	165·4	165·1	164·7	164·4	164·1	1·4
157	166·4	166·1	165·7	165·4	165·1	1·4
158	167·4	167·1	166·7	166·4	166·1	1·4
159	168·3	168·0	167·6	167·3	167·0	1·4
160	169·2	168·9	168·6	168·3	168·0	1·4
161	170·1	169·8	169·5	169·2	168·9	1·4
162	171·1	170·8	170·5	170·2	169·9	1·4
163	172·0	171·7	171·4	171·1	170·8	1·4
164	172·9	172·6	172·4	172·1	171·8	1·4
165	173·8	173·5	173·3	173·0	172·7	1·4
166	174·8	174·5	174·3	174·0	173·7	1·4
167	175·7	175·4	175·2	174·9	174·6	1·4
168	176·6	176·3	176·1	175·8	175·5	1·4
169	177·6	177·3	177·1	176·8	176·5	1·4
170	178·5	178·2	178·0	177·7	177·4	1·4
171	179·4	179·1	178·9	178·6	178·3	1·4
172	180·3	180·0	179·8	179·5	179·2	1·4
173	181·2	181·0	180·7	180·5	180·2	1·4
174	182·1	181·9	181·6	181·4	181·1	1·4
175	183·0	182·8	182·5	182·3	182·0	1·4

TRUE PER CENT.

Ind. 176 to 194. Temp. 31° to 35°.

Indication.	TEMPERATURES.					Corr. to vol.
	31°	32°	33°	34°	35°	
						Add
176	183·9	183·7	183·4	183·2	182·9	1·4
177	184·9	184·7	184·4	184·2	183·9	1·4
178	185·8	185·6	185·3	185·1	184·8	1·4
179	186·7	186·5	186·2	186·0	185·7	1·4
180	187·6	187·3	187·1	186·8	186·6	1·4
181	188·5	188·2	188·0	187·7	187·5	1·4
182	189·4	189·1	188·9	188·6	188·4	1·4
183	190·3	190·0	189·8	189·5	189·3	1·4
184	191·1	190·9	190·6	190·4	190·2	1·4
185	192·0	191·8	191·5	191·3	191·1	1·4
186	192·8	192·6	192·3	192·1	191·9	1·4
187	193·7	193·5	193·2	193·0	192·8	1·4
188	194·6	194·4	194·1	193·9	193·7	1·4
189	195·4	195·2	195·0	194·8	194·6	1·4
190	196·3	196·1	195·9	195·7	195·5	1·4
191	197·2	197·0	196·8	196·6	196·4	1·4
192	198·1	197·9	197·8	197·6	197·4	1·4
193	199·0	198·8	198·7	198·5	198·3	1·5
194	200·0	199·8	199·6	199·4	199·2	1·5

TRUE PER CENT.

Ind. 1 to 25. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
1	1·9	1·9	2·0	2·0	2·0	0·1
2	2·9	2·9	3·0	3·0	3·0	0·1
3	3·9	3·9	4·0	4·0	4·0	0·1
4	4·9	4·9	5·0	5·0	5·0	0·1
5	5·9	5·9	6·0	6·0	6·0	0·1
6	6·9	6·9	7·0	7·0	7·0	0·1
7	7·9	7·9	8·0	8·0	8·0	0·1
8	9·0	9·0	9·0	9·0	9·0	0·1
9	10·0	10·0	10·1	10·1	10·1	0·1
10	11·1	11·1	11·2	11·2	11·2	0·1
11	12·2	12·2	12·3	12·3	12·3	0·1
12	13·3	13·3	13·3	13·3	13·3	0·1
13	14·4	14·4	14·4	14·4	14·4	0·1
14	15·5	15·5	15·5	15·5	15·5	0·1
15	16·6	16·6	16·6	16·6	16·6	0·1
16	17·7	17·7	17·7	17·7	17·7	0·1
17	18·8	18·8	18·7	18·7	18·7	0·1
18	19·9	19·9	19·8	19·8	19·8	0·1
19	21·1	21·1	21·0	21·0	21·0	0·1
20	22·4	22·4	22·3	22·3	22·3	0·2
21	23·6	23·5	23·5	23·4	23·4	0·2
22	24·7	24·7	24·6	24·6	24·5	0·2
23	25·8	25·8	25·7	25·7	25·6	0·2
24	27·0	27·0	26·9	26·9	26·8	0·2
25	28·1	28·1	28·0	28·0	27·9	0·2

TRUE PER CENT.

Ind. 26 to 50. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
26	29·4	29·3	29·3	29·2	29·1	0·2
27	30·8	30·7	30·6	30·5	30·4	0·2
28	32·1	32·0	31·8	31·7	31·6	0·2
29	33·5	33·3	33·2	33·0	32·9	0·2
30	34·7	34·5	34·4	34·2	34·1	0·2
31	35·9	35·8	35·6	35·5	35·3	0·3
32	37·4	37·2	36·9	36·7	36·5	0·3
33	38·8	38·5	38·3	38·0	37·8	0·3
34	40·1	39·9	39·6	39·4	39·1	0·3
35	41·6	41·3	41·1	40·8	40·5	0·3
36	43·0	42·7	42·4	42·1	41·8	0·3
37	44·3	44·0	43·7	43·4	43·1	0·4
38	45·6	45·3	45·0	44·7	44·4	0·4
39	46·9	46·6	46·2	45·9	45·6	0·4
40	48·2	47·8	47·5	47·1	46·8	0·4
41	49·4	49·0	48·7	48·3	48·0	0·4
42	50·6	50·2	49·9	49·5	49·1	0·4
43	51·9	51·5	51·1	50·7	50·3	0·4
44	53·2	52·8	52·3	51·9	51·5	0·4
45	54·5	54·1	53·6	53·2	52·8	0·5
46	55·8	55·3	54·9	54·4	54·0	0·5
47	57·0	56·5	56·1	55·6	55·2	0·5
48	58·2	57·8	57·3	56·9	56·4	0·5
49	59·4	58·9	58·5	58·0	57·5	0·5
50	60·8	60·2	59·7	59·1	58·6	0·5

TRUE PER CENT.

Ind 51 to 75. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
51	61·9	61·4	60·8	60·3	59·8	0·5
52	63·0	62·5	61·9	61·4	60·9	0·5
53	64·0	63·5	63·1	62·6	62·1	0·6
54	65·0	64·5	64·1	63·6	63·1	0·6
55	66·1	65·6	65·2	64·7	64·2	0·6
56	67·1	66·6	66·2	65·7	65·2	0·6
57	68·2	67·7	67·3	66·8	66·3	0·6
58	69·2	68·7	68·3	67·8	67·3	0·6
59	70·2	69·7	69·3	68·8	68·3	0·6
60	71·3	70·8	70·3	69·8	69·3	0·6
61	72·3	71·8	71·4	70·9	70·4	0·6
62	73·3	72·8	72·4	71·9	71·4	0·7
63	74·4	73·9	73·4	72·9	72·4	0·7
64	75·4	74·9	74·4	73·9	73·4	0·7
65	76·4	75·9	75·4	74·9	74·4	0·7
66	77·3	76·9	76·4	76·0	75·5	0·7
67	78·3	77·8	77·4	76·9	76·5	0·7
68	79·2	78·8	78·3	77·9	77·4	0·7
69	80·1	79·7	79·2	78·8	78·3	0·7
70	81·1	80·6	80·2	79·7	79·3	0·7
71	82·1	81·6	81·2	80·7	80·3	0·7
72	83·0	82·5	82·1	81·6	81·2	0·7
73	83·9	83·5	83·0	82·6	82·1	0·8
74	84·9	84·4	84·0	83·5	83·1	0·8
75	85·9	85·4	85·0	84·5	84·1	0·8

TRUE PER CENT.

Ind. 76 to 100. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
76	86·8	86·3	85·9	85·4	85·0	0·8
77	87·7	87·2	86·8	86·3	85·9	0·8
78	88·7	88·2	87·8	87·3	86·9	0·8
79	89·6	89·2	88·7	88·3	87·9	0·8
80	90·6	90·1	89·7	89·2	88·8	0·8
81	91·5	91·0	90·6	90·1	89·7	0·8
82	92·5	92·0	91·6	91·1	90·7	0·8
83	93·5	93·0	92·6	92·1	91·7	0·8
84	94·4	94·0	93·5	93·1	92·7	0·8
85	95·3	94·9	94·5	94·1	93·7	0·8
86	96·3	95·9	95·4	95·0	94·6	0·8
87	97·2	96·8	96·4	96·0	95·6	0·8
88	98·2	97·8	97·3	96·9	96·5	0·8
89	99·1	98·7	98·3	97·9	97·5	0·9
90	100·1	99·7	99·2	98·8	98·4	0·9
91	101·0	100·6	100·2	99·8	99·4	0·9
92	102·0	101·6	101·1	100·7	100·3	0·9
93	102·9	102·5	102·1	101·7	101·3	0·9
94	103·9	103·5	103·1	102·7	102·3	0·9
95	104·9	104·5	104·0	103·6	103·2	0·9
96	105·8	105·4	105·0	104·6	104·2	0·9
97	106·8	106·4	106·0	105·6	105·2	0·9
98	107·7	107·3	107·0	106·6	106·2	0·9
99	108·6	108·2	107·9	107·5	107·1	0·9
100	109·6	109·2	108·9	108·5	108·1	0·9

TRUE PER CENT.

Ind. 101 to 125. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
101	110·5	110·1	109·8	109·4	109·0	0·9
102	111·5	111·1	110·8	110·4	110·0	0·9
103	112·5	112·1	111·7	111·3	110·9	0·9
104	113·4	113·0	112·7	112·3	111·9	0·9
105	114·4	114·0	113·7	113·3	112·9	0·9
106	115·3	114·9	114·6	114·2	113·8	0·9
107	116·3	115·9	115·6	115·2	114·8	0·9
108	117·3	116·9	116·6	116·2	115·8	0·9
109	118·3	117·9	117·6	117·2	116·8	0·9
110	119·2	118·9	118·5	118·2	117·8	0·9
111	120·2	119·8	119·5	119·1	118·7	0·9
112	121·1	120·8	120·4	120·1	119·7	0·9
113	122·1	121·8	121·4	121·1	120·7	0·9
114	123·1	122·7	122·4	122·0	121·6	1·0
115	124·1	123·7	123·4	123·0	122·6	1·0
116	125·0	124·7	124·3	124·0	123·6	1·0
117	126·0	125·7	125·3	125·0	124·6	1·0
118	127·0	126·7	126·3	126·0	125·6	1·0
119	127·9	127·6	127·2	126·9	126·5	1·0
120	128·9	128·6	128·2	127·9	127·5	1·0
121	129·9	129·6	129·2	128·9	128·5	1·0
122	130·9	130·6	130·2	129·9	129·5	1·0
123	131·9	131·6	131·2	130·9	130·5	1·0
124	132·9	132·6	132·2	131·9	131·5	1·0
125	133·9	133·6	133·2	132·9	132·5	1·0

TRUE PER CENT.

Ind. 126 to 150. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
126	134·9	134·5	134·2	133·8	133·5	1·0
127	135·8	135·4	135·1	134·7	134·4	1·0
128	136·8	136·4	136·1	135·7	135·4	1·0
129	137·7	137·4	137·0	136·7	136·3	1·0
130	138·7	138·3	138·0	137·6	137·3	1·0
131	139·6	139·3	138·9	138·6	138·2	1·0
132	140·6	140·2	139·9	139·5	139·2	1·0
133	141·6	141·2	140·9	140·5	140·2	1·0
134	142·5	142·1	141·8	141·4	141·1	1·0
135	143·5	143·1	142·8	142·4	142·1	1·0
136	144·5	144·1	143·8	143·4	143·1	1·0
137	145·4	145·1	144·7	144·4	144·0	1·0
138	146·4	146·0	145·7	145·3	145·0	1·0
139	147·4	147·0	146·7	146·3	146·0	1·0
140	148·4	148·0	147·7	147·3	147·0	1·0
141	149·3	149·0	148·6	148·3	148·0	1·0
142	150·3	149·9	149·6	149·2	148·9	1·0
143	151·2	150·9	150·5	150·2	149·9	1·0
144	152·2	151·9	151·5	151·2	150·9	1·0
145	153·2	152·9	152·5	152·2	151·9	1·0
146	154·2	153·8	153·5	153·1	152·8	1·0
147	155·1	154·8	154·4	154·1	153·8	1·1
148	156·1	155·8	155·4	155·1	154·8	1·1
149	157·1	156·7	156·4	156·0	155·7	1·1
150	158·0	157·7	157·3	157·0	156·7	1·1

TRUE PER CENT.

Ind. 151 to 175. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
151	159·0	158·7	158·3	158·0	157·7	1·1
152	160·0	159·7	159·3	159·0	158·7	1·1
153	160·9	160·6	160·2	159·9	159·6	1·1
154	161·9	161·6	161·2	160·9	160·6	1·1
155	162·9	162·6	162·2	161·9	161·6	1·1
156	163·8	163·5	163·2	162·9	162·6	1·1
157	164·8	164·5	164·1	163·8	163·5	1·1
158	165·8	165·5	165·1	164·8	164·5	1·1
159	166·7	166·4	166·1	165·8	165·5	1·1
160	167·7	167·4	167·0	166·7	166·4	1·1
161	168·6	168·3	168·0	167·7	167·4	1·1
162	169·6	169·3	169·0	168·7	168·4	1·1
163	170·5	170·2	169·9	169·6	169·3	1·1
164	171·5	171·2	170·9	170·6	170·3	1·1
165	172·4	172·1	171·9	171·6	171·3	1·1
166	173·4	173·1	172·8	172·5	172·2	1·1
167	174·3	174·0	173·8	173·5	173·2	1·1
168	175·2	174·9	174·7	174·4	174·1	1·1
169	176·2	175·9	175·6	175·3	175·0	1·1
170	177·1	176·8	176·6	176·3	176·0	1·1
171	178·0	177·7	177·5	177·2	176·9	1·1
172	178·9	178·7	178·4	178·2	177·9	1·1
173	179·9	179·6	179·4	179·1	178·8	1·1
174	180·8	180·5	180·3	180·0	179·7	1·1
175	181·7	181·5	181·2	181·0	180·7	1·1

TRUE PER CENT.

Ind. 176 to 195. Temp. 36° to 40°.

Indication.	TEMPERATURES.					Corr. to vol.
	36°	37°	38°	39°	40°	
						Add
176	182·6	182·4	182·1	181·9	181·6	1·1
177	183·6	183·3	183·1	182·8	182·5	1·1
178	184·5	184·3	184·0	183·8	183·5	1·1
179	185·4	185·2	184·9	184·7	184·4	1·1
180	186·4	186·1	185·9	185·6	185·4	1·1
181	187·3	187·1	186·8	186·6	186·4	1·1
182	188·2	188·0	187·7	187·5	187·3	1·1
183	189·1	188·9	188·6	188·4	188·2	1·2
184	190·0	189·7	189·5	189·2	189·0	1·2
185	190·9	190·6	190·4	190·1	189·9	1·2
186	191·7	191·5	191·2	191·0	190·8	1·2
187	192·6	192·4	192·1	191·9	191·7	1·2
188	193·5	193·3	193·1	192·9	192·7	1·2
189	194·4	194·2	194·0	193·8	193·6	1·2
190	195·3	195·1	194·9	194·7	194·5	1·2
191	196·2	196·0	195·8	195·6	195·4	1·2
192	197·2	197·0	196·7	196·5	196·3	1·2
193	198·1	197·9	197·7	197·5	197·3	1·2
194	199·0	198·8	198·6	198·4	198·2	1·2
195	199·9	199·7	199·6	199·4	199·2	1·2

TRUE PER CENT.

Ind. 1 to 25. **Temp. 41° to 45°.**

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
1	2·0	2·0	1·9	1·9	1·9	0·1
2	3·0	3·0	2·9	2·9	2·9	0·1
3	4·0	4·0	4·0	4·0	4·0	0·1
4	5·0	5·0	5·0	5·0	5·0	0·1
5	6·0	6·0	6·0	6·0	6·0	0·1
6	7·0	7·0	7·0	7·0	7·0	0·1
7	8·0	8·0	8·0	8·0	8·0	0·1
8	9·0	9·0	9·0	9·0	9·0	0·1
9	10·1	10·1	10·0	10·0	10·0	0·1
10	11·2	11·2	11·1	11·1	11·1	0·1
11	12·3	12·3	12·2	12·2	12·2	0·1
12	13·3	13·3	13·3	13·3	13·3	0·1
13	14·4	14·4	14·3	14·3	14·3	0·1
14	15·5	15·5	15·4	15·4	15·4	0·1
15	16·6	16·5	16·5	16·4	16·4	0·1
16	17·7	17·6	17·6	17·5	17·5	0·1
17	18·7	18·6	18·6	18·5	18·5	0·1
18	19·7	19·7	19·6	19·6	19·5	0·1
19	20·9	20·9	20·8	20·8	20·7	0·1
20	22·2	22·1	22·1	22·0	21·9	0·1
21	23·3	23·2	23·2	23·1	23·0	0·1
22	24·4	24·3	24·3	24·2	24·1	0·1
23	25·5	25·4	25·4	25·3	25·2	0·1
24	26·7	26·6	26·5	26·4	26·3	0·2
25	27·8	27·7	27·6	27·5	27·4	0·2

TRUE PER CENT.

Ind. 26 to 50. Temp. 41° to 45°.

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
26	29·0	28·9	28·7	28·6	28·5	0·2
27	30·3	30·1	30·0	29·8	29·7	0·2
28	31·4	31·3	31·1	31·0	30·8	0·2
29	32·7	32·6	32·4	32·3	32·1	0·2
30	33·9	33·7	33·6	33·4	33·2	0·2
31	35·1	34·9	34·8	34·6	34·4	0·2
32	36·3	36·1	35·9	35·7	35·5	0·2
33	37·6	37·4	37·1	36·9	36·7	0·2
34	38·9	38·6	38·4	38·1	37·9	0·2
35	40·2	39·9	39·7	39·4	39·1	0·2
36	41·5	41·2	40·9	40·6	40·3	0·2
37	42·8	42·5	42·1	41·8	41·5	0·3
38	44·1	43·7	43·4	43·0	42·7	0·3
39	45·3	44·9	44·6	44·2	43·9	0·3
40	46·5	46·1	45·8	45·4	45·1	0·3
41	47·6	47·3	46·9	46·6	46·2	0·3
42	48·8	48·4	48·1	47·7	47·4	0·3
43	49·9	49·6	49·2	48·9	48·5	0·3
44	51·1	50·7	50·4	50·0	49·6	0·3
45	52·4	52·0	51·5	51·1	50·7	0·3
46	53·6	53·2	52·7	52·3	51·9	0·3
47	54·8	54·3	53·9	53·4	53·0	0·3
48	55·9	55·5	55·0	54·6	54·1	0·4
49	57·1	56·6	56·2	55·7	55·3	0·4
50	58·2	57·7	57·3	56·8	56·4	0·4

TRUE PER CENT.

Ind 51 to 75. Temp. 41° to 45°.

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
51	59·3	58·9	58·4	58·0	57·5	0·4
52	60·4	60·0	59·5	59·1	58·6	0·4
53	61·6	61·1	60·7	60·2	59·7	0·4
54	62·6	62·2	61·7	61·3	60·8	0·4
55	63·7	63·2	62 8	62·3	61·8	0·4
56	64·7	64·2	63·8	63·3	62·8	0·4
57	65·8	65·3	64·9	64·4	63·9	0·4
58	66·8	66·3	65·9	65·4	64·9	0·4
59	67·8	67·3	66·9	66·4	65·9	0·5
60	68·8	68·4	67·9	67·5	67·0	0·5
61	69·9	69·4	69·0	68·5	68·0	0·5
62	70·9	70·4	70·0	69·5	69·0	0·5
63	71·9	71·4	71·0	70·5	70·0	0·5
64	72·9	72·4	72·0	71·5	71·0	0·5
65	73·9	73·4	73·0	72 5	72·0	0·5
66	75·0	74·5	74·0	73·5	73·0	0·5
67	76·0	75·5	75·0	74·5	74·0	0·5
68	76·9	76·5	76·0	75·6	75·1	0·5
69	77·9	77·4	77·0	76·5	76·1	0·5
70	78·9	78·4	78·0	77·5	77·1	0·5
71	79·8	79·4	78·9	78·5	78·0	0·6
72	80·8	80·3	79·9	79·4	79·0	0·6
73	81·7	81·3	80·8	80·4	80·0	0·6
74	82·7	82·2	81·8	81·3	80·9	0·6
75	83·6	83·2	82·7	82·3	81·8	0·6

TRUE PER CENT.

Ind. 76 to 100. Temp. 41° to 45°

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
76	84·6	84·1	83·7	83·2	82·8	0·6
77	85·5	85·0	84·6	84·1	83·7	0·6
78	86·5	86·0	85·6	85·1	84·7	0·6
79	87·5	87·0	86·6	86·1	85·7	0·6
80	88·4	88·0	87·5	87·1	86·7	0·6
81	89·3	88·9	88·4	88·0	87·6	0·6
82	90·3	89·9	89·4	89·0	88·6	0·6
83	91·3	90·9	90·4	90·0	89·6	0·6
84	92·3	91·9	91·4	91·0	90·6	0·6
85	93·3	92·8	92·4	91·9	91·5	0·6
86	94·2	93·8	93·3	92·9	92·5	0·6
87	95·2	94·8	94·3	93·9	93·5	0·6
88	96·1	95·7	95·3	94·9	94·5	0·6
89	97·1	96·7	96·2	95·8	95·4	0·6
90	98·0	97·6	97·2	96·8	96·4	0·6
91	99·0	98·6	98·1	97·7	97·3	0·6
92	99·9	99·5	99·1	98·7	98·3	0·6
93	100·9	100·5	100·1	99·7	99·3	0·6
94	101·9	101·5	101·1	100·7	100·3	0·7
95	102·8	102·4	102·0	101·6	101·2	0·7
96	103·8	103·4	103·0	102·6	102·2	0·7
97	104·8	104·4	104·0	103·6	103·2	0·7
98	105·8	105·4	105·0	104·6	104·2	0·7
99	106·7	106·3	105·9	105·5	105·1	0·7
100	107·7	107·3	106·9	106·5	106·1	0·7

TRUE PER CENT.

Ind. 101 to 125. Temp. 41° to 45°.

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
101	108·6	108·2	107·9	107·5	107·1	0·7
102	109·6	109·2	108·8	108·4	108·0	0·7
103	110·5	110·1	109·8	109·4	109·0	0·7
104	111·5	111·1	110·8	110·4	110·0	0·7
105	112·5	112·1	111·8	111·4	111·0	0·7
106	113·4	113·0	112·7	112·3	111·9	0·7
107	114·4	114·0	113·7	113·3	112·9	0·7
108	115·4	115·0	114·7	114·3	113·9	0·7
109	116·4	116·0	115·7	115·3	114·9	0·7
110	117·4	117·0	116·6	116·2	115·8	0·7
111	118·3	117·9	117·6	117·2	116·8	0·7
112	119·3	118·9	118·6	118·2	117·8	0·7
113	120·3	119·9	119·6	119·2	118·8	0·7
114	121·2	120·8	120·5	120·1	119·7	0·7
115	122·2	121·8	121·5	121·1	120·7	0·7
116	123·2	122·8	122·5	122·1	121·7	0·7
117	124·2	123·8	123·5	123·1	122·7	0·7
118	125·2	124·8	124·5	124·1	123·7	0·7
119	126·1	125·8	125·4	125·1	124·7	0·7
120	127·1	126·8	126·4	126·1	125·7	0·7
121	128·1	127·8	127·4	127·1	126·7	0·7
122	129·1	128·8	128·4	128·1	127·7	0·7
123	130·1	129·8	129·4	129·1	128·7	0·7
124	131·1	130·7	130·4	130·0	129·6	0·7
125	132·1	131·7	131·4	131·0	130·6	0·7

TRUE PER CENT.

Ind. 126 to 150. Temp. 41° to 45°

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
126	133·1	132·7	132·4	132·0	131·6	0·7
127	134·0	133·7	133·3	133·0	132·6	0·7
128	135·0	134·7	134·3	134·0	133·6	0·8
129	135·9	135·6	135·2	134·9	134·5	0·8
130	136·9	136·6	136·2	135·9	135·5	0·8
131	137·9	137·5	137·2	136·8	136·5	0·8
132	138·9	138·5	138·2	137·8	137·5	0·8
133	139·8	139·5	139·1	138·8	138·4	0·8
134	140·8	140·4	140·1	139·7	139·4	0·8
135	141·8	141·4	141·1	140·7	140·4	0·8
136	142·7	142·4	142·0	141·7	141·3	0·8
137	143·7	143·3	143·0	142·6	142·3	0·8
138	144·7	144·3	144·0	143·6	143·3	0·8
139	145·7	145·3	145·0	144·6	144·3	0·8
140	146·7	146·3	146·0	145·6	145·3	0·8
141	147·7	147·3	147·0	146·6	146·3	0·8
142	148·6	148·3	147·9	147·6	147·3	0·8
143	149·6	149·2	148·9	148·5	148·2	0·8
144	150·6	150·2	149·9	149·5	149·2	0·8
145	151·6	151·2	150·9	150·5	150·2	0·8
146	152·5	152·1	151·8	151·4	151·1	0·8
147	153·5	153·1	152·8	152·4	152·1	0·8
148	154·5	154·1	153·8	153·4	153·1	0·8
149	155·4	155·1	154·7	154·4	154·1	0·8
150	156·4	156·1	155·7	155·4	155·1	0·8

TRUE PER CENT.

Ind. 151 to 175. Temp. 41° to 45°

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
151	157·4	157·1	156·7	156·4	156·1	0·8
152	158·4	158·0	157·7	157·3	157·0	0·8
153	159·3	159·0	158·6	158·3	158·0	0·8
154	160·3	160·0	159·6	159·3	159·0	0·8
155	161·3	161·0	160·6	160·3	160·0	0·8
156	162·3	161·9	161·6	161·2	160·9	0·8
157	163·2	162·9	162·5	162·2	161·9	0·8
158	164·2	163·9	163·5	163·2	162·9	0·8
159	165·2	164·9	164·5	164·2	163·9	0·8
160	166·1	165·8	165·4	165·1	164·8	0·8
161	167·1	166·8	166·4	166·1	165·8	0·8
162	168·1	167·8	167·4	167·1	166·8	0·8
163	169·0	168·7	168·4	168·1	167·8	0·8
164	170·0	169·7	169·3	169·0	168·7	0·8
165	171·0	170·7	170·3	170·0	169·7	0·8
166	171·9	171·6	171·3	171·0	170·7	0·8
167	172·9	172·6	172·3	172·0	171·7	0·8
168	173·8	173·5	173·2	172·9	172·6	0·8
169	174·7	174·4	174·2	173·9	173·6	0·8
170	175·7	175·4	175·1	174·8	174·5	0·8
171	176·6	176·3	176·1	175·8	175·5	0·8
172	177·6	177·3	177·0	176·7	176·4	0·8
173	178·5	178·2	178·0	177·7	177·4	0·8
174	179·4	179·1	178·9	178·6	178·3	0·8
175	180·4	180·1	179·9	179·6	179·3	0·8

TRUE PER CENT.

Ind. 176 to 196. Temp. 41° to 45°

Indication.	TEMPERATURES.					Corr. to vol.
	41°	42°	43°	44°	45°	
						Add
176	181·3	181·1	180·8	180·6	180·3	0·9
177	182·2	182·0	181·7	181·5	181·2	0·9
178	183·2	182·9	[illegible]	182·4	182·1	0·9
179	184·1	183·9	183·6	183·4	183·1	0·9
180	185·1	184·9	184·6	184·4	184·1	0·9
181	186·1	185·9	185·6	185·4	185·1	0·9
182	187·0	186·8	186·5	186·3	186·0	0·9
183	188·0	187·7	187·5	187·2	187·0	0·9
184	188·8	188·5	188·3	188·0	187·8	0·9
185	189·7	189·5	189·2	189·0	188·8	0·9
186	190·6	190·4	190·1	189·9	189·7	0·9
187	191·5	191·[illegible]	191·0	190·8	190·6	0·9
188	192·5	192·[illegible]	192·0	191·7	191·5	0·9
189	193·4	193·2	192·9	192·7	192·5	0·9
190	194·3	194·1	193·8	193·6	193·4	0·9
191	195·2	195·0	194·8	194·6	194·4	0·9
192	196·1	195·9	195·7	195·5	195·3	0·9
193	197·1	196·9	196·7	196·5	196·3	0·9
194	198·0	197·8	197·6	197·4	197·2	0·9
195	199·0	198·8	198·6	198·4	198·2	0·9
196	199·9	199·7	199·5	199·3	199·1	0·9

TRUE PER CENT.

Ind. 1 to 25. **Temp. 46° to 50°.**

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
1	1·9	1·9	1·8	1·8	1·8	0·1
2	2·9	2·9	2·8	2·8	2·8	0·1
3	4·0	3·9	3·9	3·8	3·8	0·1
4	5·0	4·9	4·9	4·8	4·8	0·1
5	6·0	5·9	5·9	5·8	5·8	0·1
6	7·0	6·9	6·9	6·8	6·8	0·1
7	8·0	7·9	7·9	7·8	7·8	0·1
8	9·0	8·9	8·9	8·8	8·8	0·1
9	10·0	9·9	9·9	9·8	9·8	0·1
10	11·1	11·0	11·0	10·9	10·9	0·1
11	12·2	12·1	12·1	12·0	12·0	0·1
12	13·2	13·2	13·1	13·1	13·0	0.1
13	14·2	14·2	14·1	14·1	14·0	0·1
14	15·3	15·3	15·2	15·2	15·1	0·1
15	16·3	16·3	16·2	16·2	16·1	0·1
16	17·4	17·3	17·3	17·2	17·1	0·1
17	18·4	18·4	18·3	18·3	18·2	0·1
18	19·4	19·4	19·3	19·3	19·2	0·1
19	20·6	20·5	20·5	20·4	20·3	0·1
20	21·8	21·7	21·6	21·5	21·4	0·1
21	22·9	22·8	22·7	22·6	22·5	0·1
22	24·0	23·9	23·7	23·6	23·5	0·1
23	25·1	25·0	24·8	24·7	24·6	0·1
24	26·2	26·1	25·9	25·8	25·7	0·1
25	27·3	27·1	27·0	26·8	26·7	0·1

TRUE PER CENT.

Ind 26 to 50. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
26	28·4	28·2	28·1	27·9	27·8	0·1
27	29·5	29·4	29·2	29·1	28·9	0·1
28	30·6	30·5	30·3	30·2	30·0	0·1
29	31·9	31·7	31·5	31·3	31·1	0·1
30	33·0	32·8	32·6	32·4	32·2	0·1
31	34·2	34·0	33·7	33·5	33·3	0·1
32	35·3	35·1	34·8	34·6	34·4	0·1
33	36·5	36·2	36·0	35·7	35·5	0·2
34	37·6	37·4	37·1	36·9	36·6	0·2
35	38·8	38·5	38·3	38·0	37·7	0·2
36	40·0	39·7	39·5	39·2	38·9	0·2
37	41·2	40·9	40·6	40·3	40·0	0·2
38	42·4	42·1	41·7	41·4	41·1	0·2
39	43·6	43·3	42·9	42·6	42·3	0·2
40	44·8	44·4	44·1	43·7	43·4	0·2
41	45·9	45·5	45·2	44·8	44·5	0·2
42	47·0	46·7	46·3	46·0	45·6	0·2
43	48·1	47·7	47·4	47·0	46·6	0·2
44	49·2	48·8	48·5	48·1	47·7	0·2
45	50·3	49·9	49·6	49·2	48·8	0·2
46	51·5	51·1	50·7	50·3	49·9	0·2
47	52·6	52·2	51·7	51·3	50·9	0·2
48	53·7	53·3	52·8	52·4	52·0	0·2
49	54·9	54·4	54·0	53·5	53·1	0·2
50	56·0	55·5	55·1	54·6	54·2	0·2

TRUE PER CENT.

Ind 51 to 75. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
51	57·1	56·6	56·2	55·7	55·3	0·2
52	58·2	57·7	57·3	56·8	56·4	0·3
53	59·2	58·8	58·3	57·9	57·4	0·3
54	60·3	59·9	59·4	59·0	58·5	0·3
55	61·3	60·9	60·4	60·0	59·5	0·3
56	62·3	61·9	61·4	61·0	60·5	0·3
57	63·4	63·0	62·5	62·1	61·6	0·3
58	64·4	64·0	63·5	63·1	62·6	0·3
59	65·4	65·0	64·5	64·1	63·6	0·3
60	66·5	66·0	65·6	65·1	64·6	0·3
61	67·5	67·0	66·6	66·1	65·6	0·3
62	68·5	68·0	67·6	67·1	66·6	0·3
63	69·5	69·0	68·6	68·1	67·6	0·3
64	70·5	70·1	69·6	69·2	68·7	0·3
65	71·5	71·1	70·6	70·2	69·7	0·3
66	72·5	72·1	71·6	71·2	70·7	0·3
67	73·5	73·1	72·6	72·2	71·7	0·3
68	74·6	74·1	73·7	73·2	72·7	0·3
69	75·6	75·1	74·7	74·2	73·7	0·4
70	76·6	76·1	75·7	75·2	74·7	0·4
71	77·5	77·1	76·6	76·2	75·7	0·4
72	78·5	78·1	77·6	77·2	76·7	0·4
73	79·5	79·1	78·6	78·2	77·7	0·4
74	80·4	80·0	79·5	79·1	78·6	0·4
75	81·4	80·9	80·5	80·0	79·6	0·4

TRUE PER CENT.

Ind. 76 to 100. Temp. 46° to 50°

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
76	82·4	81·9	81·5	81·0	80·6	0·4
77	83·3	82·8	82·4	81·9	81·5	0·4
78	84·3	83·8	83·4	82·9	82·5	0·4
79	85·3	84·8	84·4	83·9	83·5	0·4
80	86·2	85·8	85·3	84·9	84·4	0·4
81	87·2	86·7	86·3	85·8	85·4	0·4
82	88·2	87·7	87·3	86·8	86·4	0·4
83	89·2	88·7	88·3	87·8	87·4	0·4
84	90·2	89·7	89·3	88·8	88·4	0·4
85	91·1	90·7	90·2	89·8	89·4	0·4
86	92·1	91·7	91·2	90·8	90·4	0·4
87	93·1	92·7	92·2	91·8	91·4	0·4
88	94·1	93·6	93·2	92·7	92·3	0·4
89	95·0	94·6	94·1	93·7	93·3	0·4
90	96·0	95·6	95·1	94·7	94·3	0·4
91	96·9	96·5	96·1	95·7	95·3	0·4
92	97·9	97·5	97·0	96·6	96·2	0·4
93	98·9	98·5	98·0	97·6	97·2	0·4
94	99·9	99·5	99·0	98·6	98·2	0·4
95	100·8	100·4	100·0	99·6	99·2	0·4
96	101·8	101·4	101·0	100·6	100·2	0·4
97	102·8	102·4	102·0	101·6	101·2	0·4
98	103·8	103·4	103·0	102·6	102·2	0·4
99	104·7	104·3	103·9	103·5	103·1	0·4
100	105·7	105·3	104·9	104·5	104·1	0·4

TRUE PER CENT.

Ind. 101 to 125. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	Add
101	106·7	106·3	105·9	105·5	105·1	0·4
102	107·6	107·2	106·8	106·4	106·0	0·4
103	108·6	108·2	107·8	107·4	107·0	0·4
104	109·6	109·2	108·8	108·4	108·0	0·5
105	110·6	110·2	109·8	109·4	109·0	0·5
106	111·5	111·1	110·8	110·4	110·0	0·5
107	112·5	112·1	111·8	111·4	111·0	0·5
108	113·5	113·1	112·8	112·4	112·0	0·5
109	114·5	114·1	113·8	113·4	113·0	0·5
110	115·4	115·0	114·7	114·3	113·9	0·5
111	116·4	116·0	115·7	115·3	114·9	0·5
112	117·4	117·0	116·7	116·3	115·9	0·5
113	118·4	118·0	117·7	117·3	116·9	0·5
114	119·3	119·0	118·6	118·3	117·9	0·5
115	120·3	120·0	119·6	119·3	118·9	0·5
116	121·3	121·0	120·6	120·3	119·9	0·5
117	122·3	121·9	121·6	121·2	120·8	0·5
118	123·3	122·9	122·6	122·2	121·8	0·5
119	124·3	123·9	123·6	123·2	122·8	0·5
120	125·3	124·9	124·6	124·2	123·8	0·5
121	126·3	125·9	125·6	125·2	124·8	0·5
122	127·3	126·9	126·6	126·2	125·8	0·5
123	128·3	127·9	127·6	127·2	126·8	0·5
124	129·2	128·9	128·5	128·2	127·8	0·5
125	130·2	129·9	129·5	129·2	128·8	0·5

TRUE PER CENT.

Ind. 126 to 150. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
126	131·2	130·9	130·5	130·2	129·8	0·5
127	132·2	131·9	131·5	131·2	130·8	0·5
128	133·2	132·9	132·5	132·2	131·8	0·5
129	134·1	133·8	133·4	133·1	132·7	0·5
130	135·1	134·8	134·4	134·1	133·7	0·5
131	136·1	135·8	135·4	135·1	134·7	0·5
132	137·1	136·8	136·4	136·1	135·7	0·5
133	138·1	137·7	137·4	137·0	136·7	0·5
134	139·0	138·7	138·3	138·0	137·6	0·5
135	140·0	139·7	139·3	139·0	138·6	0·5
136	141·0	140·6	140·3	139·9	139·6	0·5
137	141·9	141·6	141·2	140·9	140·5	0·5
138	142·9	142·6	142·2	141·9	141·5	0·5
139	143·9	143·6	143·2	142·9	142·5	0·5
140	144·9	144·6	144·2	143·9	143·5	0·5
141	145·9	145·6	145·2	144·9	144·5	0·5
142	146·9	146·6	146·2	145·9	145·5	0·5
143	147·9	147·5	147·2	146·8	146·5	0·5
144	148·9	148·5	148·2	147·8	147·5	0·5
145	149·9	149·5	149·2	148·8	148·5	0·5
146	150·8	150·5	150·1	149·8	149·5	0·5
147	151·8	151·4	151·1	150·7	150·4	0·5
148	152·8	152·4	152·1	151·7	151·4	0·5
149	153·8	153·4	153·1	152·7	152·4	0·5
150	154·8	154·4	154·1	153·7	153·4	0·5

TRUE PER CENT.

Ind. 151 to 175. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
151	155·8	155·4	155·1	154·7	154·4	0·5
152	156·7	156·4	156·0	155·7	155·4	0·5
153	157·7	157·4	157·0	156·7	156·4	0·5
154	158·7	158·3	158·0	157·6	157·3	0·5
155	159·7	159·3	159·0	158·6	158·3	0·5
156	160·6	160·3	159·9	159·6	159·3	0·5
157	161·6	161·3	160·9	160·6	160·3	0·5
158	162·6	162·3	161·9	161·6	161·3	0·5
159	163·6	163·3	162·9	162·6	162·3	0·5
160	164·5	164·2	163·8	163·5	163·2	0·5
161	165·5	165·2	164·8	164·5	164·2	0·6
162	166·5	166·2	165·8	165·5	165·2	0·6
163	167·5	167·2	166·8	166·5	166·2	0·6
164	168·4	168·1	167·8	167·5	167·2	0·6
165	169·4	169·1	168·8	168·5	168·2	0·6
166	170·4	170·1	169·8	169·5	169·2	0·6
167	171·4	171·1	170·7	170·4	170·1	0·6
168	172·3	172·0	171·7	171·4	171·1	0·6
169	173·3	173·0	172·7	172·4	172·1	0·6
170	174·2	173·9	173·7	173·4	173·1	0·6
171	175·2	174·9	174·7	174·4	174·1	0·6
172	176·1	175·8	175·6	175·3	175·0	0·6
173	177·1	176·8	176·5	176·2	175·9	0·6
174	178·0	177·7	177·5	177·2	176·9	0·6
175	179·0	178·7	178·5	178·2	177·9	0·6

TRUE PER CENT.

Ind. 176 to 197. Temp. 46° to 50°.

Indication.	TEMPERATURES.					Corr. to vol.
	46°	47°	48°	49°	50°	
						Add
176	180·0	179·7	179·5	179·2	178·9	0·6
177	180·9	180·7	180·4	180·2	179·9	0·6
178	181·8	181·6	181·3	181·1	180·8	0·6
179	182·8	182·5	182·3	182·0	181·7	0·6
180	183·8	183·5	183·3	183·0	182·7	0·6
181	184·8	184·5	184·3	184·0	183·7	0·6
182	185·7	185·5	185·2	185·0	184·7	0·6
183	186·7	186·5	186·2	186·0	185·7	0·6
184	187·6	187·3	187·1	186·8	186·6	0·6
185	188·6	188·3	188·1	187·8	187·6	0·6
186	189·5	189·2	189·0	188·7	188·5	0·6
187	190·4	190·1	189·9	189·6	189·4	0·6
188	191·3	191·1	190·8	190·6	190·4	0·6
189	192·3	192·0	191·8	191·5	191·3	0·6
190	193·2	193·0	192·7	192·5	192·3	0·6
191	194·2	194·0	193·7	193·5	193·3	0·6
192	195·1	194·9	194·6	194·4	194·2	0·6
193	196·1	195·9	195·6	195·4	195·2	0·6
194	197·0	196·8	196·6	196·4	196·2	0·6
195	198·0	197·8	197·5	197·3	197·1	0·6
196	198·9	198·7	198·5	198·3	198·1	0·6
197	199·9	199·7	199·5	199·3	199·1	0·6

TRUE PER CENT.

Ind. 1 to 25. **Temp. 51° to 55°.**

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
1	1·7	1·7	1·6	1·6	1·5	0·0
2	2·7	2·7	2·6	2·6	2·5	0·0
3	3·7	3·7	3·6	3·6	3·5	0·0
4	4·7	4·7	4·6	4·6	4·5	0·0
5	5·7	5·7	5·6	5·6	5·5	0·0
6	6·7	6·7	6·6	6·6	6·5	0·0
7	7·7	7·7	7·6	7·6	7·5	0·0
8	8·7	8·7	8·6	8·6	8·5	0·0
9	9·7	9·7	9·6	9·6	9·5	0·0
10	10·8	10·7	10·7	10·6	10·5	0·0
11	11·9	11·8	11·7	11·6	11·5	0·0
12	12·9	12·8	12·8	12·7	12·6	0·0
13	13·9	13·8	13·8	13·7	13·6	0·0
14	15·0	14·9	14·8	14·7	14·6	0·0
15	16·0	15·9	15·8	15·7	15·6	0·1
16	17·0	16·9	16·9	16·8	16·7	0·1
17	18·1	18·0	17·9	17·8	17·7	0·1
18	19·1	19·0	18·9	18·8	18·7	0·1
19	20·2	20·1	19·9	19·8	19·7	0·1
20	21·3	21·1	21·0	20·8	20·7	0·1
21	22·4	22·2	22·1	21·9	21·8	0·1
22	23·4	23·2	23·1	22·9	22·8	0·1
23	24·5	24·3	24·2	24·0	23·9	0·1
24	25·5	25·4	25·2	25·1	24·9	0·1
25	26·5	26·4	26·2	26·1	25·9	0·1

TRUE PER CENT.

Ind. 26 to 50. **Temp. 51° to 55°.**

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
26	27·6	27·5	27·3	27·2	27·0	0·1
27	28·7	28·5	28·4	28·2	28·0	0·1
28	29·8	29·6	29·5	29·3	29·1	0·1
29	30·9	30·7	30·5	30·3	30·1	0·1
30	32·0	31·8	31·6	31·4	31·2	0·1
31	33·1	32·9	32·6	32·4	32·2	0·1
32	34·2	34·0	33·7	33·5	33·3	0·1
33	35·3	35·0	34·8	34·5	34·3	0·1
34	36·4	36·1	35·9	35·6	35·4	0·1
35	37·4	37·2	36·9	36·7	36·4	0·1
36	38·6	38·3	38·1	37·8	37·5	0·1
37	39·7	39·4	39·1	38·8	38·5	0·1
38	40·8	40·5	40·2	39·9	39·6	0·1
39	42·0	41·6	41·3	40·9	40·6	0·1
40	43·1	42·7	42·4	42·0	41·7	0·1
41	44·1	43·8	43·4	43·1	42·7	0·1
42	45·2	44·9	44·5	44·2	43·8	0·1
43	46·3	45·9	45·6	45·2	44·9	0·1
44	47·3	47·0	46·6	46·3	45·9	0·1
45	48·4	48·0	47·7	47·3	46·9	0·1
46	49·5	49·1	48·8	48·4	48·0	0·1
47	50·5	50·1	49·8	49·4	49·0	0·1
48	51·6	51·2	50·8	50·4	50·0	0·1
49	52·7	52·3	51·8	51·4	51·0	0·1
50	53·8	53·4	52·9	52·5	52·1	0·1

TRUE PER CENT.

Ind. 51 to 75. Temp. 51° to 55°.

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
51	54·9	54·4	54·0	53·5	53·1	0·1
52	56·0	55·5	55·1	54·6	54·2	0·1
53	57·0	56·5	56·1	55·6	55·2	0·1
54	58·0	57·6	57·1	56·7	56·2	0·1
55	59·0	58·6	58·1	57·7	57·2	0·1
56	60·0	59·6	59·1	58·7	58·2	0·1
57	61·1	60·6	60·2	59·7	59·2	0·1
58	62·1	61·7	61·2	60·8	60·3	0·1
59	63·1	62·7	62·2	61·8	61·3	0·1
60	64·1	63·7	63·2	62·8	62·3	0·1
61	65·1	64·7	64·2	63·8	63·3	0·1
62	66·1	65·7	65·2	64·8	64·3	0·2
63	67·1	66·7	66·2	65·8	65·3	0·2
64	68·2	67·7	67·3	66·8	66·3	0·2
65	69·2	68·7	68·3	67·8	67·3	0·2
66	70·2	69·7	69·3	68·8	68·3	0·2
67	71·2	70·7	70·3	69·8	69·3	0·2
68	72·2	71·7	71·3	70·8	70·3	0·2
69	73·2	72·7	72·3	71·8	71·3	0·2
70	74·2	73·7	73·3	72·8	72·3	0·2
71	75·2	74·7	74·3	73·8	73·3	0·2
72	76·2	75·7	75·3	74·8	74·3	0·2
73	77·2	76·7	76·3	75·8	75·3	0·2
74	78·1	77·7	77·2	76·8	76·3	0·2
75	79·1	78·7	78·2	77·8	77·3	0·2

TRUE PER CENT.

Ind. 76 to 100. **Temp. 51° to 55°.**

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
76	80·1	79·7	79·2	78·8	78·3	0·2
77	81·1	80·6	80·2	79·7	79·3	0·2
78	82·1	81·6	81·2	80·7	80·3	0·2
79	83·1	82·6	82·2	81·7	81·3	0·2
80	84·0	83·6	83·1	82·7	82·3	0·2
81	85·0	84·6	84·1	83·7	83·3	0·2
82	86·0	85·5	85·1	84·6	84·2	0·2
83	87·0	86·5	86·1	85·6	85·2	0·2
84	88·0	87·5	87·1	86·6	86·2	0·2
85	89·0	88·5	88·1	87·6	87·2	0·2
86	90·0	89·5	89·1	88·6	88·2	0·2
87	91·0	90·5	90·1	89·6	89·2	0·2
88	91·9	91·5	91·0	90·6	90·2	0·2
89	92·9	92·5	92·0	91·6	91·2	0·2
90	93·9	93·4	93·0	92·5	92·1	0·2
91	94·9	94·4	94·0	93·5	93·1	0·2
92	95·8	95·4	94·9	94·5	94·1	0·2
93	96·8	96·4	95·9	95·5	95·1	0·2
94	97·8	97·4	96·9	96·5	96·1	0·2
95	98·8	98·4	97·9	97·5	97·1	0·2
96	99·8	99·4	98·9	98·5	98·1	0·2
97	100·8	100·4	99·9	99·5	99·1	0·2
98	101·8	101·4	100·9	100·5	100·1	0·2
99	102·7	102·3	101·9	101·5	101·1	0·2
100	103·7	103·3	102·9	102·5	102·1	0·2

TRUE PER CENT.

Ind. 101 to 125. Temp. 51° to 55°.

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
101	104·7	104·3	103·9	103·5	103·1	0·2
102	105·6	105·2	104·8	104·4	104·0	0·2
103	106·6	106·2	105·8	105·4	105·0	0·2
104	107·6	107·2	106·8	106·4	106·0	0·2
105	108·6	108·2	107·8	107·4	107·0	0·2
106	109·6	109·2	108·8	108·4	108·0	0·2
107	110·6	110·2	109·8	109·4	109·0	0·2
108	111·6	111·2	110·8	110·4	110·0	0·2
109	112·6	112·2	111·8	111·4	111·0	0·2
110	113·5	113·1	112·8	112·4	112·0	0·2
111	114·5	114·1	113·8	113·4	113·0	0·2
112	115·5	115·1	114·8	114·4	114·0	0·2
113	116·5	116·1	115·8	115·4	115·0	0·2
114	117·5	117·1	116·7	116·3	115·9	0·2
115	118·5	118·1	117·7	117·3	116·9	0·2
116	119·5	119·1	118·7	118·3	117·9	0·2
117	120·4	120·0	119·7	119·3	118·9	0·2
118	121·4	121·0	120·7	120·3	119·9	0·2
119	122·4	122·0	121·7	121·3	120·9	0·2
120	123·4	123·0	122·7	122·3	121·9	0·2
121	124·4	124·0	123·7	123·3	122·9	0·2
122	125·4	125·0	124·7	124·3	123·9	0·2
123	126·4	126·0	125·7	125·3	124·9	0·2
124	127·4	127·0	126·7	126·3	125·9	0·2
125	128·4	128·0	127·7	127·3	126·9	0·2

TRUE PER CENT.

Ind. 126 to 150. **Temp. 51° to 55°.**

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	Add
126	129·4	129·0	128·7	128·3	127·9	0·3
127	130·4	130·0	129·7	129·3	128·9	0·3
128	131·4	131·0	130·7	130·3	129·9	0·3
129	132·3	132·0	131·6	131·3	130·9	0·3
130	133·3	132·9	132·6	132·2	131·8	0·3
131	134·3	133·9	133·6	133·2	132·8	0·3
132	135·3	134·9	134·6	134·2	133·8	0·3
133	136·3	135·9	135·6	135·2	134·8	0·3
134	137·2	136·9	136·5	136·2	135·8	0·3
135	138·2	137·9	137·5	137·2	136·8	0·3
136	139·2	138·9	138·5	138·2	137·8	0·3
137	140·2	139·8	139·5	139·1	138·8	0·3
138	141·2	140·8	140·5	140·1	139·8	0·3
139	142·2	141·8	141·5	141·1	140·8	0·3
140	143·2	142·8	142·5	142·1	141·8	0·3
141	144·2	143·8	143·5	143·1	142·8	0·3
142	145·2	144·8	144·5	144·1	143·8	0·3
143	146·2	145·8	145·5	145·1	144·8	0·3
144	147·2	146·8	146·5	146·1	145·8	0·3
145	148·1	147·8	147·4	147·1	146·7	0·3
146	149·1	148·8	148·4	148·1	147·7	0·3
147	150·1	149·7	149·4	149·0	148·7	0·3
148	151·1	150·7	150·4	150·0	149·7	0·3
149	152·1	151·7	151·4	151·0	150·7	0·3
150	153·1	152·7	152·4	152·0	151·7	0·3

TRUE PER CENT.

Ind. 151 to 175. **Temp. 51° to 55°.**

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
151	154·1	153·7	153·4	153·0	152·7	0·3
152	155·1	154·7	154·4	154·0	153·7	0·3
153	156·1	155·7	155·4	155·0	154·7	0·3
154	157·0	156·7	156·3	156·0	155·7	0·3
155	158·0	157·7	157·3	157·0	156·7	0·3
156	159·0	158·7	158·3	158·0	157·7	0·3
157	160·0	159·7	159·3	159·0	158·7	0·3
158	161·0	160·6	160·3	159·9	159·6	0·3
159	162·0	161·6	161·3	160·9	160·6	0·3
160	162·9	162·6	162·2	161·9	161·6	0·3
161	163·9	163·6	163·2	162·9	162·6	0·3
162	164·9	164·6	164·2	163·9	163·6	0·3
163	165·9	165·6	165·2	164·9	164·6	0·3
164	166·9	166·6	166·2	165·9	165·6	0·3
165	167·9	167·6	167·2	166·9	166·6	0·3
166	168·9	168·6	168·2	167·9	167·6	0·3
167	169·8	169·5	169·2	168·9	168·6	0·3
168	170·8	170·5	170·2	169·9	169·6	0·3
169	171·8	171·5	171·2	170·9	170·6	0·3
170	172·8	172·5	172·2	171·9	171·6	0·3
171	173·8	173·5	173·2	172·9	172·6	0·3
172	174·7	174·4	174·1	173·8	173·5	0·3
173	175·6	175·3	175·1	174·8	174·5	0·3
174	176·6	176·3	176·1	175·8	175·5	0·3
175	177·6	177·3	177·1	176·8	176·5	0·3

TRUE PER CENT.

Ind. 176 to 199. Temp. 51° to 55°.

Indication.	TEMPERATURES.					Corr. to vol.
	51°	52°	53°	54°	55°	
						Add
176	178·6	178·3	178·1	177·8	177·5	0·3
177	179·6	179·3	179·1	178·8	178·5	0·3
178	180·5	180·2	180·0	179·7	179·4	0·3
179	181·4	181·2	180·9	180·7	180·4	0·3
180	182·4	182·2	181·9	181·7	181·4	0·3
181	183·4	183·2	182·9	182·7	182·4	0·3
182	184·4	184·2	183·9	183·7	183·4	0·3
183	185·4	185·2	184·9	184·7	184·4	0·3
184	186·3	186·1	185·8	185·6	185·3	0·3
185	187·3	187·1	186·8	186·6	186·3	0·3
186	188·3	188·0	187·8	187·5	187·3	0·3
187	189·2	189·0	188·7	188·5	188·3	0·3
188	190·2	190·0	189·7	189·5	189·3	0·3
189	191·1	190·9	190·6	190·4	190·2	0·3
190	192·1	191·9	191·6	191·4	191·2	0·3
191	193·1	192·9	192·6	192·4	192·2	0·3
192	194·0	193·8	193·6	193·4	193·2	0·3
193	195·0	194·8	194·6	194·4	194·2	0·3
194	196·0	195·8	195·6	195·4	195·2	0·3
195	196·9	196·7	196·5	196·3	196·1	0·3
196	197·9	197·7	197·5	197·3	197·1	0·3
197	198·9	198·7	198·5	198·3	198·1	0·3
198	199·9	199·7	199·5	199·3	199·1	0·3
199	· ·	· ·	· ·	· ·	200·0	0·3

TRUE PER CENT.

Ind. 1 to 25. Temp. 56° to 60°.

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
1	1·4	1·3	1·2	1·1	1·0	0·0
2	2·4	2·3	2·2	2·1	2·0	0·0
3	3·4	3·3	3·2	3·1	3·0	0·0
4	4·4	4·3	4·2	4·1	4·0	0·0
5	5·4	5·3	5·2	5·1	5·0	0·0
6	6·4	6·3	6·2	6·1	6·0	0·0
7	7·4	7·3	7·2	7·1	7·0	0·0
8	8·4	8·3	8·2	8·1	8·0	0·0
9	9·4	9·3	9·2	9·1	9·0	0·0
10	10·4	10·3	10·2	10·1	10·0	0·0
11	11·4	11·3	11·2	11·1	11·0	0·0
12	12·5	12·4	12·2	12·1	12·0	0·0
13	13·5	13·4	13·2	13·1	13·0	0·0
14	14·5	14·4	14·2	14·1	14·0	0·0
15	15·5	15·4	15·2	15·1	15·0	0·0
16	16·6	16·4	16·3	16·1	16·0	0·0
17	17·6	17·4	17·3	17·1	17·0	0·0
18	18·6	18·4	18·3	18·1	18·0	0·0
19	19·6	19·4	19·3	19·1	19·0	0·0
20	20·6	20·4	20·3	20·1	20·0	0·0
21	21·6	21·5	21·3	21·2	21·0	0·0
22	22·6	22·5	22·3	22·2	22·0	0·0
23	23·7	23·5	23·4	23·2	23·0	0·0
24	24·7	24·5	24·4	24·2	24·0	0·0
25	25·7	25·5	25·4	25·2	25·0	0·0

TRUE PER CENT.

Ind. 26 to 50. Temp. 56° to 60°

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	Add
26	26·8	26·6	26·4	26·2	26·0	0·0
27	27·8	27·6	27·4	27·2	27·0	0·0
28	28·9	28·7	28·4	28·2	28·0	0·0
29	29·9	29·7	29·4	29·2	29·0	0·0
30	31·0	30·7	30·5	30·2	30·0	0·0
31	32·0	31·7	31·5	31·2	31·0	0·0
32	33·0	32·8	32·5	32·3	32·0	0·0
33	34·0	33·8	33·5	33·3	33·0	0·0
34	35·1	34·8	34·6	34·3	34·0	0·0
35	36·1	35·8	35·6	35·3	35·0	0·0
36	37·2	36·9	36·6	36·3	36·0	0·0
37	38·2	37·9	37·6	37·3	37·0	0·0
38	39·3	39·0	38·6	38·3	38·0	0·0
39	40·3	40·0	39·6	39·3	39·0	0·0
40	41·4	41·0	40·7	40·3	40·0	0·0
41	42·4	42·0	41·7	41·3	41·0	0·0
42	43·4	43·1	42·7	42·4	42·0	0·0
43	44·5	44·1	43·8	43·4	43·0	0·0
44	45·5	45·1	44·8	44·4	44·0	0·0
45	46·5	46·1	45·8	45·4	45·0	0·0
46	47·6	47·2	46·8	46·4	46·0	0·0
47	48·6	48·2	47·8	47·4	47·0	0·0
48	49·6	49·2	48·8	48·4	48·0	0·0
49	50·6	50·2	49·8	49·4	49·0	0·0
50	51·7	51·3	50·8	50·4	50·0	0·0

TRUE PER CENT.

Ind. 51 to 75. Temp. 56° to 60°.

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
51	52·7	52·3	51·8	51·4	51·0	0·0
52	53·8	53·3	52·9	52·4	52·0	0·0
53	54·8	54·3	53·9	53·4	53·0	0·0
54	55·8	55·3	54·9	54·4	54·0	0·0
55	56·8	56·3	55·9	55·4	55·0	0·0
56	57·8	57·3	56·9	56·4	56·0	0·0
57	58·8	58·3	57·9	57·4	57·0	0·0
58	59·8	59·4	58·9	58·5	58·0	0·0
59	60·8	60·4	59·9	59·5	59·0	0·0
60	61·8	61·4	60·9	60·5	60·0	0·0
61	62·8	62·4	61·9	61·5	61·0	0·0
62	63·8	63·4	62·9	62·5	62·0	0·0
63	64·8	64·4	63·9	63·5	63·0	0·0
64	65·8	65·4	64·9	64·5	64·0	0·0
65	66·8	66·4	65·9	65·5	65·0	0·0
66	67·8	67·4	66·9	66·5	66·0	0·0
67	68·8	68·4	67·9	67·5	67·0	0·0
68	69·8	69·4	68·9	68·5	68·0	0·0
69	70·8	70·4	69·9	69·5	69·0	0·0
70	71·8	71·4	70·9	70·5	70·0	0·0
71	72·8	72·4	71·9	71·5	71·0	0·0
72	73·8	73·4	72·9	72·5	72·0	0·0
73	74·8	74·4	73·9	73·5	73·0	0·0
74	75·8	75·4	74·9	74·5	74·0	0·0
75	76·8	76·4	75·9	75·5	75·0	0·0

TRUE PER CENT.

Ind. 76 to 100. Temp. 56° to 60°.

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
76	77·8	77·4	76·9	76·5	76·0	0·0
77	78·8	78·4	77·9	77·5	77·0	0·0
78	79·8	79·4	78·9	78·5	78·0	0·0
79	80·8	80·4	79·9	79·5	79·0	0·0
80	81·8	81·4	80·9	80·5	80·0	0·0
81	82·8	82·4	81·9	81·5	81·0	0·0
82	83·8	83·3	82·9	82·4	82·0	0·0
83	84·8	84·3	83·9	83·4	83·0	0·0
84	85·8	85·3	84·9	84·4	84·0	0·0
85	86·8	86·3	85·9	85·4	85·0	0·0
86	87·8	87·3	86·9	86·4	86·0	0·0
87	88·8	88·3	87·9	87·4	87·0	0·0
88	89·8	89·3	88·9	88·4	88·0	0·0
89	90·8	90·3	89·9	89·4	89·0	0·0
90	91·7	91·3	90·8	90·4	90·0	0·0
91	92·7	92·3	91·8	91·4	91·0	0·0
92	93·7	93·3	92·8	92·4	92·0	0·0
93	94·7	94·3	93·8	93·4	93·0	0·0
94	95·7	95·3	94·8	94·4	94·0	0·0
95	96·7	96·3	95·8	95·4	95·0	0·0
96	97·7	97·3	96·8	96·4	96·0	0·0
97	98·7	98·3	97·8	97·4	97·0	0·0
98	99·7	99·3	98·8	98·4	98·0	0·0
99	100·7	100·3	99·8	99·4	99·0	0·0
100	101·7	101·3	100·8	100·4	100·0	0·0

TRUE PER CENT.

Ind. 101 to 125. **Temp. 56° to 60°.**

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
101	102·7	102·3	101·8	101·4	101·0	0·0
102	103·6	103·2	102·8	102·4	102·0	0·0
103	104·6	104·2	103·8	103·4	103·0	0·0
104	105·6	105·2	104·8	104·4	104·0	0·0
105	106·6	106·2	105·8	105·4	105·0	0·0
106	107·6	107·2	106·8	106·4	106·0	0·0
107	108·6	108·2	107·8	107·4	107·0	0·0
108	109·6	109·2	108·8	108·4	108·0	0·0
109	110·6	110·2	109·8	109·4	109·0	0·0
110	111·6	111·2	110·8	110·4	110·0	0·0
111	112·6	112·2	111·8	111·4	111·0	0·0
112	113·6	113·2	112·8	112·4	112·0	0·0
113	114·6	114·2	113·8	113·4	113·0	0·0
114	115·5	115·1	114·8	114·4	114·0	0·0
115	116·5	116·1	115·8	115·4	115·0	0·0
116	117·5	117·1	116·8	116·4	116·0	0·0
117	118·5	118·1	117·8	117·4	117·0	0·0
118	119·5	119·1	118·8	118·4	118·0	0·0
119	120·5	120·1	119·8	119·4	119·0	0·0
120	121·5	121·1	120·8	120·4	120·0	0·0
121	122·5	122·1	121·8	121·4	121·0	0·0
122	123·5	123·1	122·8	122·4	122·0	0·0
123	124·5	124·1	123·8	123·4	123·0	0·0
124	125·5	125·1	124·8	124·4	124·0	0·0
125	126·5	126·1	125·8	125·4	125·0	0·0

TRUE PER CENT.

Ind. 126 to 150. Temp. 56° to 60°.

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	Add
126	127·5	127·1	126·8	126·4	126·0	0·0
127	128·5	128·1	127·8	127·4	127·0	0·0
128	129·5	129·1	128·8	128·4	128·0	0·0
129	130·5	130·1	129·8	129·4	129·0	0·0
130	131·4	131·1	130·7	130·4	130·0	0·0
131	132·4	132·1	131·7	131·4	131·0	0·0
132	133·4	133·1	132·7	132·4	132·0	0·0
133	134·4	134·1	133·7	133·4	133·0	0·0
134	135·4	135·1	134·7	134·4	134·0	0·0
135	136·4	136·1	135·7	135·4	135·0	0·0
136	137·4	137·1	136·7	136·4	136·0	0·0
137	138·4	138·1	137·7	137·4	137·0	0·0
138	139·4	139·1	138·7	138·4	138·0	0·0
139	140·4	140·1	139·7	139·4	139·0	0·0
140	141·4	141·1	140·7	140·4	140·0	0·0
141	142·4	142·1	141·7	141·4	141·0	0·0
142	143·4	143·1	142·7	142·4	142·0	0·0
143	144·4	144·1	143·7	143·4	143·0	0·0
144	145·4	145·1	144·7	144·4	144·0	0·0
145	146·4	146·0	145·7	145·3	145·0	0·0
146	147·4	147·0	146·7	146·3	146·0	0·0
147	148·4	148·0	147·7	147·3	147·0	0·0
148	149·4	149·0	148·7	148·3	148·0	0·0
149	150·4	150·0	149·7	149·3	149·0	0·0
150	151·4	151·0	150·7	150·3	150·0	0·0

TRUE PER CENT.

Ind. 151 to 175. **Temp. 56° to 60°.**

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
151	152·4	152·0	151·7	151·3	151·0	0·0
152	153·4	153·0	152·7	152·3	152·0	0·0
153	154·4	154·0	153·7	153·3	153·0	0·0
154	155·4	155·0	154·7	154·3	154·0	0·0
155	156·4	156·0	155·7	155·3	155·0	0·0
156	157·4	157·0	156·7	156·3	156·0	0·0
157	158·4	158·0	157·7	157·3	157·0	0·0
158	159·3	159·0	158·6	158·3	158·0	0·0
159	160·3	160·0	159·6	159·3	159·0	0·0
160	161·3	161·0	160·6	160·3	160·0	0·0
161	162·3	162·0	161·6	161·3	161·0	0·0
162	163·3	163·0	162·6	162·3	162·0	0·0
163	164·3	164·0	163·6	163·3	163·0	0·0
164	165·3	165·0	164·6	164·3	164·0	0·0
165	166·3	166·0	165·6	165·3	165·0	0·0
166	167·3	167·0	166·6	166·3	166·0	0·0
167	168·3	168·0	167·6	167·3	167·0	0·0
168	169·3	169·0	168·6	168·3	168·0	0·0
169	170·3	170·0	169·6	169·3	169·0	0·0
170	171·3	171·0	170·6	170·3	170·0	0·0
171	172·3	172·0	171·6	171·3	171·0	0·0
172	173·2	172·9	172·6	172·3	172·0	0·0
173	174·2	173·9	173·6	173·3	173·0	0·0
174	175·2	174·9	174·6	174·3	174·0	0·0
175	176·2	175·9	175·6	175·3	175·0	0·0

TRUE PER CENT.

Ind. 176 to 200. Temp. 56° to 60°

Indication.	TEMPERATURES.					Corr. to vol.
	56°	57°	58°	59°	60°	
						Add
176	177·2	176·9	176·6	176·3	176·0	0·0
177	178·2	177·9	177·6	177·3	177·0	0·0
178	179·1	178·8	178·6	178·3	178·0	0·0
179	180·1	179·8	179·6	179·3	179·0	0·0
180	181·1	180·8	180·6	180·3	180·0	0·0
181	182·1	181·8	181·6	181·3	181·0	0·0
182	183·1	182·8	182·6	182·3	182·0	0·0
183	184·1	183·8	183·6	183·3	183·0	0·0
184	185·0	184·8	184·5	184·3	184·0	0·0
185	186·0	185·8	185·5	185·3	185·0	0·0
186	187·0	186·8	186·5	186·3	186·0	0·0
187	188·0	187·8	187·5	187·3	187·0	0·0
188	189·0	188·8	188·5	188·3	188·0	0·0
189	190·0	189·7	189·5	189·2	189·0	0·0
190	191·0	190·7	190·5	190·2	190·0	0·0
191	192·0	191·7	191·5	191·2	191·0	0·0
192	193·0	192·7	192·5	192·2	192·0	0·0
193	194·0	193·7	193·5	193·2	193·0	0·0
194	195·0	194·7	194·5	194·2	194·0	0·0
195	195·9	195·7	195·4	195·2	195·0	0·0
196	196·9	196·7	196·4	196·2	196·0	0·0
197	197·9	197·7	197·4	197·2	197·0	0·0
198	198·9	198·7	198·4	198·2	198·0	0·0
199	199·8	199·6	199·4	199·2	199·0	0·0
200	· ·	· ·	· ·	· ·	200·0	0·0

TRUE PER CENT.

Ind. 1 to 25. **Temp. 61° to 65°.**

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	
						Subt.
1	0·9	0·8	0·7	0·6	0·5	0·1
2	1·9	1·8	1·7	1·6	1·5	0·1
3	2·9	2·8	2·7	2·6	2·5	0·1
4	3·9	3·8	3·6	3·5	3·4	0·1
5	4·9	4·8	4·6	4·5	4·4	0·1
6	5·9	5·8	5·6	5·5	5·4	0·1
7	6·9	6·8	6·6	6·5	6·4	0·1
8	7·9	7·8	7·6	7·5	7·4	0·1
9	8·9	8·8	8·6	8·5	8·4	0·1
10	9·9	9·7	9·6	9·4	9·3	0·1
11	10·9	10·7	10·6	10·4	10·3	0·1
12	11·9	11·7	11·6	11·4	11·3	0·1
13	12·9	12·7	12·6	12·4	12·3	0·1
14	13·9	13·7	13·6	13·4	13·3	0·1
15	14·9	14·7	14·6	14·4	14·3	0·1
16	15·8	15·7	15·5	15·4	15·2	0·1
17	16·8	16·7	16·5	16·4	16·2	0·1
18	17·8	17·7	17·5	17·4	17·2	0·1
19	18·8	18·7	18·5	18·4	18·2	0·1
20	19·8	19·6	19·5	19·3	19·1	0·1
21	20·8	20·6	20·4	20·2	20·0	0·1
22	21·8	21·6	21·4	21·2	21·0	0·1
23	22·8	22·6	22·4	22·2	22·0	0·1
24	23·8	23·6	23·4	23·2	23·0	0·1
25	24·8	24·6	24·4	24·2	24·0	0·1

TRUE PER CENT.

Ind. 26 to 50. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	Subt.
26	25·8	25·6	25·3	25·1	24·9	0·1
27	26·8	26·6	26·3	26·1	25·9	0·1
28	27·8	27·6	27·3	27·1	26·9	0·1
29	28·8	28·5	28·3	28·0	27·8	0·1
30	29·8	29·5	29·3	29·0	28·8	0·1
31	30·7	30·5	30·2	30·0	29·7	0·1
32	31·7	31·5	31·2	31·0	30·7	0·1
33	32·7	32·5	32·2	32·0	31·7	0·1
34	33·7	33·4	33·2	32·9	32·6	0·1
35	34·7	34·4	34·2	33·9	33·6	0·1
36	35·7	35·4	35·2	34·9	34·6	0·1
37	36·7	36·4	36·1	35·8	35·5	0·1
38	37·7	37·4	37·1	36·8	36·5	0·1
39	38·7	38·4	38·0	37·7	37·4	0·1
40	39·7	39·3	39·0	38·6	38·3	0·1
41	40·7	40·3	40·0	39·6	39·3	0·1
42	41·6	41·3	40·9	40·6	40·2	0·1
43	42·6	42·3	41·9	41·6	41·2	0·1
44	43·6	43·2	42·9	42·5	42·1	0·1
45	44·6	44·2	43·9	43·5	43·1	0·1
46	45·6	45·2	44·9	44·5	44·1	0·1
47	46.6	46·2	45·8	45·4	45·0	0·1
48	47·6	47·2	46·7	46·3	45·9	0·1
49	48·6	48·2	47·7	47·3	46·9	0·1
50	49·6	49·2	48·7	48·3	47·9	0·1

TRUE PER CENT.

Ind. 51 to 75. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	
						Subt.
51	50·6	50·2	49·7	49·3	48·9	0·1
52	51·6	51·2	50·7	50·3	49·9	0·1
53	52·6	52·2	51·7	51·3	50·9	0·1
54	53·6	53·2	52·7	52·3	51·9	0·1
55	54·6	54·1	53·7	53·2	52·8	0·1
56	55·6	55·1	54·7	54·2	53·8	0·1
57	56·6	56·1	55·7	55·2	54·8	0·1
58	57·6	57·1	56·7	56·2	55·8	0·1
59	58·6	58·1	57·7	57·2	56·8	0·1
60	59·5	59·1	58·6	58·2	57·7	0·1
61	60·5	60·1	59·6	59·2	58·7	0·1
62	61·5	61·1	60·6	60·2	59·7	0·1
63	62·5	62·1	61·6	61·2	60·7	0·1
64	63·5	63·1	62·6	62·2	61·7	0·2
65	64·5	64·1	63·6	63·2	62·7	0·2
66	65·5	65·1	64·6	64·2	63·7	0·2
67	66·5	66·1	65·6	65·2	64·7	0·2
68	67·5	67·1	66·6	66·2	65·7	0·2
69	68·5	68·1	67·6	67·2	66·7	0·2
70	69·5	69·1	68·6	68·2	67·7	0·2
71	70·5	70·1	69·6	69·2	68·7	0·2
72	71·5	71·1	70·6	70·2	69·7	0·2
73	72·5	72·1	71·6	71·2	70·7	0·2
74	73·5	73·1	72·6	72·2	71·7	0·2
75	74·5	74·1	73·6	73·2	72·7	0·2

TRUE PER CENT.

Ind. 76 to 100. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	
						Subt.
76	75·5	75·1	74·6	74·2	73·7	0·2
77	76·5	76·1	75·6	75·2	74·7	0·2
78	77·5	77·1	76·6	76·2	75·7	0·2
79	78·5	78·1	77·6	77·2	76·7	0·2
80	79·5	79·1	78·6	78·2	77·7	0·2
81	80·5	80·1	79·6	79·2	78·7	0·2
82	81·6	81·1	80·7	80·2	79·8	0·2
83	82·6	82·1	81·7	81·2	80·8	0·2
84	83·6	83·1	82·7	82·2	81·8	0·2
85	84·6	84·1	83·7	83·2	82·8	0·2
86	85·6	85·1	84·7	84·2	83·8	0·2
87	86·6	86·1	85·7	85·2	84·8	0·2
88	87·6	87·1	86·7	86·2	85·8	0·2
89	88·6	88·1	87·7	87·2	86·8	0·2
90	89·6	89·1	88·7	88·2	87·8	0·2
91	90·6	90·1	89·7	89·2	88·8	0·2
92	91·6	91·1	90·7	90·2	89·8	0·2
93	92·6	92·1	91·7	91·2	90·8	0·2
94	93·6	93·1	92·7	92·2	91·8	0·2
95	94·6	94·2	93·7	93·3	92·9	0·2
96	95·6	95·2	94·7	94·3	93·9	0·2
97	96·6	96·2	95·7	95·3	94·9	0·2
98	97·6	97·2	96·7	96·3	95·9	0·2
99	98·6	98·2	97·7	97·3	96·9	0·2
100	99·6	99·2	98·7	98·3	97·9	0·2

TRUE PER CENT.

Ind. 101 to 125. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	
						Subt.
101	100·6	100·2	99·7	99·3	98·9	0·2
102	101·6	101·2	100·7	100·3	99·9	0·2
103	102·6	102·2	101·7	101·3	100·9	0·2
104	103·6	103·2	102·8	102·4	102·0	0·2
105	104·6	104·2	103·8	103·4	103·0	0·2
106	105·6	105·2	104·8	104·4	104·0	0·2
107	106·6	106·2	105·8	105·4	105·0	0·2
108	107·6	107·2	106·8	106·4	106·0	0·2
109	108·6	108·2	107·8	107·4	107·0	0·2
110	109·6	109·2	108·8	108·4	108·0	0·2
111	110·6	110·2	109·8	109·4	109·0	0·2
112	111·6	111·2	110·8	110·4	110·0	0·2
113	112·6	112·2	111·8	111·4	111·0	0·2
114	113·6	113·2	112·8	112·4	112·0	0·2
115	114·6	114·2	113·8	113·4	113·0	0·2
116	115·6	115·2	114·8	114·4	114·0	0·2
117	116·6	116·2	115·8	115·4	115·0	0·2
118	117·6	117·2	116·8	116·4	116·0	0·2
119	118·6	118·2	117·8	117·4	117·0	0·2
120	119·6	119·2	118·8	118·4	118·0	0·2
121	120·6	120·2	119·9	119·5	119·1	0·2
122	121·6	121·2	120·9	120·5	120·1	0·2
123	122·6	122·2	121·9	121·5	121·1	0·2
124	123·6	123·2	122·9	122·5	122·1	0·2
125	124·6	124·2	123·9	123·5	123·1	0·2

TRUE PER CENT.

Ind. 126 to 150. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	Subt.
126	125·6	125·2	124·9	124·5	124·1	0·3
127	126·6	126·2	125·9	125·5	125·1	0·3
128	127·6	127·2	126·9	126·5	126·1	0·3
129	128·6	128·2	127·9	127·5	127·1	0·3
130	129·6	129·2	128·9	128·5	128·1	0·3
131	130·6	130·2	129·9	129·5	129·1	0·3
132	131·6	131·2	130·9	130·5	130·1	0·3
133	132·6	132·2	131·9	131·5	131·1	0·3
134	133·6	133·2	132·9	132·5	132·1	0·3
135	134·6	134·2	133·9	133·5	133·1	0·3
136	135·6	135·2	134·9	134·5	134·1	0·3
137	136·6	136·2	135·9	135·5	135·1	0·3
138	137·6	137·3	136·9	136·6	136·2	0·3
139	138·6	138·3	137·9	137·6	137·2	0·3
140	139·6	139·3	138·9	138·6	138·2	0·3
141	140·6	140·3	139·9	139·6	139·2	0·3
142	141·6	141·3	140·9	140·6	140·2	0·3
143	142·6	142·3	141·9	141·6	141·2	0·3
144	143·7	143·3	143·0	142·6	142·3	0·3
145	144·7	144·3	144·0	143·6	143·3	0·3
146	145·7	145·3	145·0	144·6	144·3	0·3
147	146·7	146·3	146·0	145·6	145·3	0·3
148	147·7	147·3	147·0	146·6	146·3	0·3
149	148·7	148·3	148·0	147·6	147·3	0·3
150	149·7	149·3	149·0	148·6	148·3	0·3

TRUE PER CENT.

Ind. 151 to 175. **Temp. 61° to 65°.**

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	
						Subt.
151	150·7	150·3	150·0	149·6	149·3	0·3
152	151·7	151·3	151·0	150·6	150·3	0·3
153	152·7	152·3	152·0	151·6	151·3	0·3
154	153·7	153·3	153·0	152·6	152·3	0·3
155	154·7	154·3	154·0	153·6	153·3	0·3
156	155·7	155·3	155·0	154·6	154·3	0·3
157	156·7	156·3	156·0	155·6	155·3	0·3
158	157·7	157·3	157·0	156·6	156·3	0·3
159	158·7	158·3	158·0	157·6	157·3	0·3
160	159·7	159·3	159·0	158·6	158·3	0·3
161	160·7	160·3	160·0	159·6	159·3	0·3
162	161·7	161·3	161·0	160·6	160·3	0·3
163	162·7	162·4	162·0	161·7	161·4	0·3
164	163·7	163·4	163·0	162·7	162·4	0·3
165	164·7	164·4	164·0	163·7	163·4	0·3
166	165·7	165·4	165·0	164·7	164·4	0·3
167	166·7	166·4	166·0	165·7	165·4	0·3
168	167·7	167·4	167·0	166·7	166·4	0·3
169	168·7	168·4	168·0	167·7	167·4	0·3
170	169·7	169·4	169·0	168·7	168·4	0·3
171	170·7	170·4	170·0	169·7	169·4	0·3
172	171·7	171·4	171·0	170·7	170·4	0·3
173	172·7	172·4	172·1	171·8	171·5	0·3
174	173·7	173·4	173·1	172·8	172·5	0·3
175	174·7	174·4	174·1	173·8	173·5	0·3

TRUE PER CENT.

Ind. 176 to 200. Temp. 61° to 65°.

Indication.	TEMPERATURES.					Corr. to vol.
	61°	62°	63°	64°	65°	Subt.
176	175·7	175·4	175·1	174·8	174·5	0·3
177	176·7	176·4	176·1	175·8	175·5	0·3
178	177·7	177·4	177·1	176·8	176·5	0·3
179	178·7	178·4	178·1	177·8	177·5	0·3
180	179·7	179·4	179·2	178·9	178·6	0·3
181	180·7	180·4	180·2	179·9	179·6	0·3
182	181·7	181·4	181·2	180·9	180·6	0·3
183	182·7	182·4	182·2	181·9	181·6	0·3
184	183·7	183·4	183·2	182·9	182·6	0·3
185	184·7	184·4	184·2	183·9	183·6	0·3
186	185·7	185·5	185·2	185·0	184·7	0·3
187	186·7	186·5	186·2	186·0	185·7	0·3
188	187·8	187·5	187·3	187·0	186·8	0·3
189	188·8	188·5	188·3	188·0	187·8	0·3
190	189·8	189·5	189·3	189·0	188·8	0·3
191	190·8	190·5	190·3	190·0	189·8	0·3
192	191·8	191·6	191·3	191·1	190·9	0·3
193	192·8	192·6	192·3	192·1	191·9	0·3
194	193·8	193·6	193·3	193·1	192·9	0·3
195	194·8	194·6	194·3	194·1	193·9	0·3
196	195·8	195·6	195·3	195·1	194·9	0·3
197	196·8	196·6	196·4	196·2	196·0	0·3
198	197·8	197·6	197·4	197·2	197·0	0·3
199	198·8	198·6	198·4	198·2	198·0	0·3
200	199·8	199·6	199·4	199·2	199·0	0·3

TRUE PER CENT.

Ind. 1 to 25. **Temp. 66° to 70°.**

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	
						Subt.
1	0·3	0·2	0·0	· ·	· ·	0·1
2	1·3	1·2	1·0	0·9	0·7	0·1
3	2·3	2·2	2·0	1·9	1·7	0·1
4	3·3	3·1	3·0	2·8	2·7	0·1
5	4·3	4·1	4·0	3·8	3·7	0·1
6	5·3	5·1	5·0	4·8	4·7	0·1
7	6·3	6·1	6·0	5·8	5·7	0·1
8	7·3	7·1	7·0	6·8	6·7	0·1
9	8·3	8·1	8·0	7·8	7·7	0·1
10	9·2	9·0	8·9	8·7	8·6	0·1
11	10·2	10·0	9·9	9·7	9·6	0·1
12	11·1	11·0	10·8	10·7	10·5	0·1
13	12·1	12·0	11·8	11·7	11·5	0·1
14	13·1	12·9	12·8	12·6	12·4	0·1
15	14·1	13·9	13·8	13·6	13·4	0·1
16	15·0	14·8	14·7	14·5	14·3	0·1
17	16·0	15·8	15·7	15·5	15·3	0·1
18	17·0	16·8	16·7	16·5	16·3	0·1
19	18·0	17·8	17·6	17·4	17·2	0·1
20	18·9	18·7	18·6	18·4	18·2	0·1
21	19·8	19·6	19·5	19·3	19·1	0·1
22	20·8	20·6	20·4	20·2	20·0	0·1
23	21·8	21·6	21·3	21·1	20·9	0·1
24	22·8	22·6	22·3	22·1	21·9	0·1
25	23·8	23·5	23·3	23·0	22·8	0·1

TRUE PER CENT.

Ind. 26 to 50. Temp. 66° to 70°.

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	Subt.
26	24·7	24·5	24·2	24·0	23·8	0·1
27	25·7	25·4	25·2	24·9	24·7	0·1
28	26·7	26·4	26·2	25·9	25·7	0·1
29	27·6	27·3	27·1	26·8	26·6	0·1
30	28·5	28·3	28·0	27·8	27·5	0·2
31	29·4	29·2	28·9	28·7	28·4	0·2
32	30·4	30·1	29·9	29·6	29·3	0·2
33	31·4	31·1	30·8	30·5	30·2	0·2
34	32·3	32·0	31·8	31·5	31·2	0·2
35	33·3	33·0	32·7	32·4	32·1	0·2
36	34·3	34·0	33·6	33·3	33·0	0·2
37	35·2	34·9	34·6	34·3	34·0	0·2
38	36·2	35·9	35·5	35·2	34·9	0·2
39	37·1	36·8	36·4	36·1	35·8	0·2
40	38·0	37·7	37·3	37·0	36·7	0·2
41	39·0	38·6	38·3	37·9	37·6	0·2
42	39·9	39·5	39·2	38·8	38·5	0·2
43	40·8	40·5	40·1	39·8	39·4	0·2
44	41·7	41·4	41·0	40·7	40·3	0·2
45	42·7	42·3	42·0	41·6	41·2	0·2
46	43·7	43·3	42·9	42·5	42·1	0·2
47	44·6	44·2	43·8	43·4	43·0	0·2
48	45·5	45·1	44·7	44·3	43·9	0·2
49	46·5	46·1	45·7	45·3	44·9	0·2
50	47·5	47·1	46·6	46·2	45·8	0·2

TRUE PER CENT.

Ind. 51 to 75. Temp. 66° to 70°.

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	
						Subt.
51	48·5	48·1	47·6	47·2	46·8	0·2
52	49·5	49·1	48·6	48·2	47·8	0·2
53	50·5	50·1	49·6	49·2	48·8	0·2
54	51·5	51·1	50·6	50·2	49·8	0·2
55	52·4	52·0	51·5	51·1	50·7	0·2
56	53·4	53·0	52·5	52·1	51·7	0·3
57	54·4	53·9	53·5	53·0	52·6	0·3
58	55·4	54·9	54·5	54·0	53·6	0·3
59	56·3	55·9	55·4	55·0	54·5	0·3
60	57·3	56·8	56·4	55·9	55·5	0·3
61	58·3	57·8	57·4	56·9	56·5	0·3
62	59·3	58·8	58·4	57·9	57·5	0·3
63	60·3	59·8	59·4	58·9	58·5	0·3
64	61·3	60·8	60·4	59·9	59·5	0·3
65	62·3	61·8	61·4	60·9	60·5	0·3
66	63·3	62·8	62·4	61·9	61·5	0·3
67	64·3	63·8	63·4	62·9	62·5	0·3
68	65·3	64·8	64·4	63·9	63·5	0·3
69	66·3	65·8	65·4	64·9	64·5	0·3
70	67·3	66·8	66·4	65·9	65·5	0·3
71	68·3	67·8	67·4	66·9	66·5	0·3
72	69·3	68·8	68·4	67·9	67·5	0·3
73	70·3	69·8	69·4	68·9	68·5	0·3
74	71·3	70·8	70·4	69·9	69·5	0·3
75	72·3	71·8	71·4	70·9	70·5	0·3

TRUE PER CENT.

Ind. 76 to 100. Temp. 66° to 70°.

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	
						Subt.
76	73·3	72·8	72·4	71·9	71·5	0·4
77	74·3	73·8	73·4	72·9	72·5	0·4
78	75·3	74·8	74·4	73·9	73·5	0·4
79	76·3	75·8	75·4	74·9	74·5	0·4
80	77·3	76·8	76·4	75·9	75·5	0·4
81	78·3	77·8	77·4	76·9	76·5	0·4
82	79·3	78·9	78·4	78·0	77·5	0·4
83	80·3	79·9	79·4	79·0	78·5	0·4
84	81·3	80·9	80·4	80·0	79·5	0·4
85	82·3	81·9	81·4	81·0	80·5	0·4
86	83·4	82·9	82·5	82·0	81·6	0·4
87	84·4	83·9	83·5	83·0	82·6	0·4
88	85·4	84·9	84·5	84·0	83·6	0·4
89	86·4	85·9	85·5	85·0	84·6	0·4
90	87·4	87·0	86·5	86·1	85·7	0·4
91	88·4	88·0	87·5	87·1	86·7	0·4
92	89·4	89·0	88·5	88·1	87·7	0·4
93	90·4	90·0	89·5	89·1	88·7	0·4
94	91·4	91·0	90·5	90·1	89·7	0·4
95	92·5	92·0	91·6	91·1	90·7	0·4
96	93·5	93·0	92·6	92·1	91·7	0·4
97	94·5	94·0	93·6	93·1	92·7	0·4
98	95·5	95·1	94·6	94·2	93·8	0·4
99	96·5	96·1	95·6	95·2	94·8	0·4
100	97·5	97·1	96·6	96·2	95·8	0·4

TRUE PER CENT.

Ld. 101 to 125. Temp. 66° to 70°.

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	
						Subt.
101	98·5	98·1	97·6	97·2	96·8	0·4
102	99·5	99·1	98·6	98·2	97·8	0·4
103	100·5	100·1	99·6	99·2	98·8	0·4
104	101·6	101·2	100·7	100·3	99·9	0·5
105	102·6	102·2	101·7	101·3	100·9	0·5
106	103·6	103·2	102·7	102·3	101·9	0·5
107	104·6	104·2	103·7	103·3	102·9	0·5
108	105·6	105·2	104·7	104·3	103·9	0·5
109	106·6	106·2	105·7	105·3	104·9	0·5
110	107·6	107·2	106·7	106·3	105·9	0·5
111	108·6	108·2	107·8	107·4	107·0	0·5
112	109·6	109·2	108·8	108·4	108·0	0·5
113	110·6	110·2	109·8	109·4	109·0	0·5
114	111·6	111·2	110·8	110·4	110·0	0·5
115	112·6	112·2	111·8	111·4	111·0	0·5
116	113·6	113·2	112·8	112·4	112·0	0·5
117	114·6	114·2	113·8	113·4	113·0	0·5
118	115·6	115·2	114·9	114·5	114·1	0·5
119	116·6	116·2	115·9	115·5	115·1	0·5
120	117·6	117·2	116·9	116·5	116·1	0·5
121	118·7	118·3	117·9	117·5	117·1	0·5
122	119·7	119·3	118·9	118·5	118·1	0·5
123	120·7	120·3	119·9	119·5	119·1	0·5
124	121·7	121·3	120·9	120·5	120·1	0·5
125	122·7	122·3	121·9	121·5	121·1	0·5

TRUE PER CENT.

Ind. 126 to 150. **Temp. 66° to 70°.**

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	
						Subt.
126	123·7	123·3	122·9	122·5	122·1	0·5
127	124·7	124·3	123·9	123·5	123·1	0·5
128	125·7	125·3	125·0	124·6	124·2	0·5
129	126·7	126·3	126·0	125·6	125·2	0·5
130	127·7	127·3	127·0	126·6	126·2	0·5
131	128·7	128·3	128·0	127·6	127·2	0·5
132	129·7	129·3	129·0	128·6	128·2	0·5
133	130·7	130·4	130·0	129·7	129·3	0·5
134	131·7	131·4	131·0	130·7	130·3	0·5
135	132·7	132·4	132·0	131·7	131·3	0·5
136	133·7	133·4	133·0	132·7	132·3	0·5
137	134·7	134·4	134·0	133·7	133·3	0·5
138	135·8	135·4	135·1	134·7	134·3	0·5
139	136·8	136·4	136·1	135·7	135·3	0·5
140	137·8	137·5	137·1	136·8	136·4	0·5
141	138·8	138·5	138·1	137·8	137·4	0·5
142	139·8	139·5	139·1	138·8	138·4	0·5
143	140·8	140·5	140·1	139·8	139·4	0·5
144	141·9	141·5	141·2	140·8	140·4	0·5
145	142·9	142·5	142·2	141·8	141·4	0·5
146	143·9	143·5	143·2	142·8	142·4	0·5
147	144·9	144·5	144·2	143·8	143·4	0·5
148	145·9	145·5	145·2	144·8	144·4	0·5
149	146·9	146·6	146·2	145·9	145·5	0·5
150	147·9	147·6	147·2	146·9	146·5	0·5

TRUE PER CENT.

Ind. 151 to 175. **Temp. 66° to 70°.**

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	Subt.
151	148·9	148·6	148·2	147·9	147·5	0·5
152	149·9	149·6	149·2	148·9	148·5	0·5
153	150·9	150·6	150·2	149·9	149·5	0·5
154	151·9	151·6	151·2	150·9	150·5	0·5
155	152·9	152·6	152·2	151·9	151·5	0·5
156	154·0	153·6	153·3	152·9	152·6	0·5
157	155·0	154·6	154·3	153·9	153·6	0·5
158	156·0	155·6	155·3	154·9	154·6	0·5
159	157·0	156·6	156·3	155·9	155·6	0·5
160	158·0	157·7	157·3	157·0	156·7	0·5
161	159·0	158·7	158·3	158·0	157·7	0·5
162	160·0	159·7	159·3	159·0	158·7	0·5
163	161·1	160·7	160·4	160·0	159·7	0·6
164	162·1	161·7	161·4	161·0	160·7	0·6
165	163·1	162·7	162·4	162·0	161·7	0·6
166	164·1	163·7	163·4	163·0	162·7	0·6
167	165·1	164·8	164·4	164·1	163·8	0·6
168	166·1	165·8	165·4	165·1	164·8	0·6
169	167·1	166·8	166·4	166·1	165·8	0·6
170	168·1	167·8	167·4	167·1	166·8	0·6
171	169·1	168·8	168·4	168·1	167·8	0·6
172	170·1	169·8	169·5	169·2	168·9	0·6
173	171·2	170·9	170·5	170·2	169·9	0·6
174	172·2	171·9	171·5	171·2	170·9	0·6
175	173·2	172·9	172·6	172·3	172·0	0·6

TRUE PER CENT.

Ind. 176 to 200. Temp. 66° to 70°

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	Subt.
176	174·2	173·9	173·6	173·3	173·0	0·6
177	175·2	174·9	174·7	174·4	174·1	0·6
178	176·2	175·9	175·7	175·4	175·1	0·6
179	177·2	176·9	176·7	176·4	176·1	0·6
180	178·3	178·0	177·7	177·4	177·1	0·6
181	179·3	179·0	178·8	178·5	178·2	0·6
182	180·3	180·0	179·8	179·5	179·2	0·6
183	181·3	181·0	180·8	180·5	180·2	0·6
184	182·3	182·0	181·8	181·5	181·2	0·6
185	183·3	183·1	182·8	182·6	182·3	0·6
186	184·4	184·1	183·9	183·6	183·3	0·6
187	185·4	185·1	184·9	184·6	184·3	0·6
188	186·5	186·2	186·0	185·7	185·4	0·6
189	187·5	187·3	187·0	186·8	186·5	0·6
190	188·6	188·3	188·1	187·8	187·6	0·6
191	189·6	189·3	189·1	188·8	188·6	0·6
192	190·7	190·4	190·2	189·9	189·7	0·6
193	191·7	191·4	191·2	190·9	190·7	0·6
194	192·7	192·4	192·2	191·9	191·7	0·6
195	193·7	193·5	193·2	193·0	192·8	0·6
196	194·7	194·5	194·2	194·0	193·8	0·6
197	195·8	195·5	195·3	195·0	194·8	0·6
198	196·8	196·6	196·3	196·1	195·9	0·6
199	197·8	197·6	197·3	197·1	196·9	0·6
200	198·8	198·6	198·3	198·1	197·9	0·6

TRUE PER CENT.

Ind. 2 to 25. **Temp. 71° to 75°.**

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	Subt.
2	0·5	0·4	0·2	0·1	· ·	0·2
3	1·5	1·4	1·2	1·1	0·9	0·2
4	2·5	2·4	2·2	2·1	1·9	0·2
5	3·5	3·4	3·2	3·1	2·9	0·2
6	4·5	4·4	4·2	4·1	3·9	0·2
7	5·5	5·3	5·2	5·0	4·8	0·2
8	6·5	6·3	6·2	6·0	5·8	0·2
9	7·5	7·3	7·2	7·0	6·8	0·2
10	8·4	8·2	8·1	7·9	7·7	0·2
11	9·4	9·2	9·1	8·9	8·7	0·2
12	10·3	10·1	10·0	9·8	9·6	0·2
13	11·3	11·1	10·9	10·7	10·5	0·2
14	12·2	12·0	11·8	11·6	11·4	0·2
15	13·2	13·0	12·7	12·5	12·3	0·2
16	14·1	13·9	13·7	13·5	13·3	0·2
17	15·1	14·9	14·7	14·5	14·3	0·2
18	16·1	15·9	15·6	15·4	15·2	0·2
19	17·0	16·8	16·6	16·4	16·2	0·2
20	18·0	17·8	17·5	17·3	17·1	0·2
21	18·9	18·7	18·4	18·2	18·0	0·2
22	19·8	19·6	19·3	19·1	18·9	0·2
23	20·7	20·4	20·2	19·9	19·7	0·2
24	21·6	21·4	21·1	20·9	20·6	0·2
25	22·5	22·3	22·0	21·8	21·5	0·2

TRUE PER CENT.

Ind. 26 to 50. **Temp. 71° to 75°.**

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	Subt.
26	23·5	23·3	23·0	22·8	22·5	0·2
27	24·4	24·2	23·9	23·7	23·4	0·2
28	25·4	25·1	24·9	24·6	24·3	0·2
29	26·3	26·0	25·8	25·5	25·2	0·2
30	27·2	26·9	26·7	26·4	26·1	0·2
31	28·1	27·8	27·6	27·3	27·0	0·2
32	29·0	28·7	28·5	28·2	27·9	0·2
33	29·9	29·6	29·4	29·1	28·8	0·2
34	30·9	30·6	30·3	30·0	29·7	0·3
35	31·8	31·5	31·2	30·9	30·6	0·3
36	32·7	32·4	32·1	31·8	31·5	0·3
37	33·7	33·4	33·0	32·7	32·4	0·3
38	34·6	34·3	33·9	33·6	33·3	0·3
39	35·5	35·2	34·8	34·5	34·2	0·3
40	36·4	36·1	35·7	35·4	35·1	0·3
41	37·3	37·0	36·6	36·3	36·0	0·3
42	38·2	37·8	37·5	37·1	36·8	0·3
43	39·1	38·7	38·4	38·0	37·7	0·3
44	39·9	39·6	39·2	38·9	38·5	0·3
45	40·8	40·5	40·1	39·8	39·4	0·3
46	41·7	41·3	40·9	40·5	40·1	0·3
47	42·6	42·2	41·9	41·5	41·1	0·3
48	43·5	43·1	42·8	42·4	42·0	0·3
49	44·5	44·1	43·6	43·2	42·8	0·3
50	45·4	45·0	44·5	44·1	43·7	0·4

TRUE PER CENT.

Ind. 51 to 75. Temp. 71° to 75°.

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	
						Subt.
51	46·4	45·9	45·5	45·0	44·6	0·4
52	47·4	46·9	46·5	46·0	45·6	0·4
53	48·4	47·9	47·5	47·0	46·6	0·4
54	49·3	48·9	48·4	48·0	47·5	0·4
55	50·3	49·8	49·4	48·9	48·5	0·4
56	51·3	50·8	50·4	49·9	49·5	0·4
57	52·2	51·8	51·3	50·9	50·5	0·4
58	53·2	52·7	52·3	51·8	51·4	0·4
59	54·1	53·7	53·2	52·8	52·4	0·4
60	55·1	54·6	54·2	53·7	53·3	0·4
61	56·1	55·6	55·2	54·7	54·3	0·4
62	57·1	56·6	56·2	55·7	55·3	0·4
63	58·1	57·6	57·2	56·7	56·3	0·4
64	59·0	58·6	58·1	57·7	57·2	0·4
65	60·0	59·6	59·1	58·7	58·2	0·4
66	61·0	60·6	60·1	59·7	59·2	0·4
67	62·0	61·6	61·1	60·7	60·2	0·5
68	63·0	62·6	62·1	61·7	61·2	0·5
69	64·0	63·6	63·1	62·7	62·2	0·5
70	65·0	64·6	64·1	63·7	63·2	0·5
71	66·0	65·6	65·1	64·7	64·2	0·5
72	67·0	66·6	66·1	65·7	65·2	0·5
73	68·0	67·6	67·1	66·7	66·2	0·5
74	69·0	68·6	68·1	67·7	67·2	0·5
75	70·0	69·6	69·1	68·7	68·2	0·5

TRUE PER CENT.

Ind. 76 to 100. Temp. 71° to 75°.

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	Subt.
76	71·0	70·6	70·1	69·7	69·2	0·5
77	72·0	71·6	71·1	70·7	70·2	0·5
78	73·0	72·6	72·1	71·7	71·2	0·5
79	74·0	73·6	73·1	72·7	72·2	0·5
80	75·0	74·6	74·1	73·7	73·2	0·6
81	76·0	75·6	75·1	74·7	74·2	0·6
82	77·0	76·6	76·1	75·7	75·2	0·6
83	78·1	77·6	77·2	76·7	76·3	0·6
84	79·1	78·6	78·2	77·7	77·3	0·6
85	80·1	79·6	79·2	78·7	78·3	0·6
86	81·1	80·7	80·2	79·8	79·3	0·6
87	82·2	81·7	81·3	80·8	80·4	0·6
88	83·2	82·7	82·3	81·8	81·4	0·6
89	84·2	83·7	83·3	82·8	82·4	0·6
90	85·2	84·8	84·3	83·9	83·4	0·6
91	86·3	85·8	85·4	84·9	84·5	0·6
92	87·3	86·8	86·4	85·9	85·5	0·6
93	88·3	87·8	87·4	86·9	86·5	0·6
94	89·3	88·8	88·4	87·9	87·5	0·6
95	90·3	89·8	89·4	88·9	88·5	0·6
96	91·3	90·9	90·4	90·0	89·6	0·6
97	92·3	91·9	91·4	91·0	90·6	0·6
98	93·4	92·9	92·5	92·0	91·6	0·7
99	94·4	93·9	93·5	93·0	92·6	0·7
100	95·4	95·0	94·5	94·1	93·7	0·7

TRUE PER CENT.

Ind. 101 to 125. Temp. 71° to 75°.

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	
						Subt.
101	96·4	96·0	95·5	95·1	94·7	0·7
102	97·4	97·0	96·5	96·1	95·7	0·7
103	98·4	98·0	97·5	97·1	96·7	0·7
104	99·5	99·0	98·6	98·1	97·7	0·7
105	100·5	100·1	99·6	99·2	98·8	0·7
106	101·5	101·1	100·6	100·2	99·8	0·7
107	102·5	102·1	101·7	101·3	100·9	0·7
108	103·5	103·1	102·7	102·3	101·9	0·7
109	104·5	104·1	3·7	103·3	102·9	0·7
110	105·5	105·1	104·7	104·3	103·9	0·7
111	106·6	106·2	105·7	105·3	104·9	0·7
112	107·6	107·2	106·7	106·3	105·9	0·7
113	108·6	108·2	107·8	107·4	107·0	0·7
114	109·6	109·2	108·8	108·4	108·0	0·7
115	110·6	110·2	109·8	109·4	109·0	0·7
116	111·6	111·2	110·8	110·4	110·0	0·7
117	112·6	112·2	111·8	111·4	111·0	0·7
118	113·7	113·3	112·8	112·4	112·0	0·7
119	114·7	114·3	113·9	113·5	113·1	0·7
120	115·7	115·3	114·9	114·5	114·1	0·7
121	116·7	116·3	115·9	115·5	115·1	0·7
122	117·7	117·3	117·0	116·6	116·2	0·7
123	118·7	118·3	118·0	117·6	117·2	0·7
124	119·7	119·3	119·0	118·6	118·2	0·7
125	120·7	120·3	120·0	119·6	119·2	0·7

TRUE PER CENT.

Ind. 126 to 150. Temp. 71° to 75°.

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	
						Subt.
126	121·7	121·3	121·0	120·6	120·2	0·7
127	122·7	122·3	122·0	121·6	121·2	0·7
128	123·8	123·4	123·0	122·6	122·2	0·7
129	124·8	124·4	124·0	123·6	123·2	0·7
130	125·8	125·4	125·0	124·6	124·2	0·7
131	126·8	126·4	126·0	125·6	125·2	0·7
132	127·8	127·4	127·1	126·7	126·3	0·7
133	128·9	128·5	128·1	127·7	127·3	0·7
134	129·9	129·5	[illegible]	128·7	128·3	0·7
135	130·9	130·5	130·2	129·8	129·4	0·7
136	131·9	131·5	131·2	130·8	130·4	0·7
137	132·9	132·5	132·2	131·8	131·4	0·7
138	133·9	133·5	133·2	132·8	132·4	0·8
139	134·9	134·5	134·2	133·8	133·4	0·8
140	136·0	135·6	135·3	134·9	134·5	0·8
141	137·0	136·6	136·3	135·9	135·5	0·8
142	138·0	137·6	137·3	136·9	136·5	0·8
143	139·0	138·6	138·3	137·9	137·5	0·8
144	140·0	139·7	139·3	139·0	138·6	0·8
145	141·0	140·7	140·3	140·0	139·6	0·8
146	142·0	141·7	141·3	141·0	140·6	0·8
147	143·0	142·7	142·3	142·0	141·6	0·8
148	144·0	143·7	143·3	143·0	142·6	0·8
149	145·1	144·8	144·4	144·1	143·7	0·8
150	146·1	145·8	145·4	145·1	144·7	0·8

TRUE PER CENT.

Ind. 151 to 175. **Temp. 71° to 75°.**

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	
						Subt.
151	147·1	146·8	146·4	146·1	145·7	0·8
152	148·1	147·8	147·4	147·1	146·7	0·8
153	149·2	148·8	148·5	148·1	147·8	0·8
154	150·2	149·8	149·5	149·1	148·8	0·8
155	151·2	150·8	150·5	150·1	149·8	0·8
156	152·2	151·9	151·5	151·2	150·8	0·8
157	153·3	152·9	152·6	152·2	151·9	0·8
158	154·3	153·9	153·6	153·2	152·9	0·8
159	155·3	154 9	154·6	154·2	153·9	0·8
160	156·3	156·0	155·6	155·3	154·9	0·8
161	157·4	157·0	156·7	156·3	156·0	0·8
162	158·4	158·0	157·7	157·3	157·0	0·8
163	159·4	159·0	158·7	158·3	158·0	0·8
164	160·4	160·0	159·7	159·3	159·0	0·8
165	161·4	161·1	160·7	160·4	160·1	0·8
166	162·4	162·1	161·7	161·4	161·1	0·8
167	163·5	163·1	162·8	162·4	162·1	0·8
168	164·5	164·1	163·8	163·4	163·1	0·8
169	165·5	165·2	164·8	164·5	164·2	0·8
170	166·5	166·2	165·8	165·5	165·2	0·8
171	167·5	167·2	166·8	166·5	166·2	0·8
172	168·6	168·2	167·9	167·5	167·2	0·8
173	169·6	169·3	168·9	168·6	168·3	0·8
174	170·6	170·3	169·9	169·6	169·3	0·8
175	171·7	171·4	171·0	170·7	170·4	0·9

TRUE PER CENT.

Ind. 176 to 200. **Temp. 71° to 75°.**

Indication.	TEMPERATURES.					Corr. to vol.
	71°	72°	73°	74°	75°	
						Subt.
176	172·7	172·4	172·0	171·7	171·4	0·9
177	173·8	173·5	173·1	172·8	172·5	0·9
178	174·8	174·5	174·1	173·8	173·5	0·9
179	175·8	175·5	175·2	174·9	174·6	0·9
180	176·8	176·5	176·2	175·9	175·6	0·9
181	177·9	177·6	177·3	177·0	176·7	0·9
182	178·9	178·6	178·3	178·0	177·7	0·9
183	179·9	179·6	179·4	179·1	178·8	0·9
184	180·9	180·6	180·4	180·1	179·8	0·9
185	182·0	181·7	181·4	181·1	180·8	0·9
186	183·0	182·7	182·5	182·2	181·9	0·9
187	184·0	183·8	183·5	183·3	183·0	0·9
188	185·1	184·9	184·6	184·4	184·1	0·9
189	186·2	186·0	185·7	185·5	185·2	0·9
190	187·3	187·1	186·8	186·6	186·3	0·9
191	188·4	188·1	187·9	187·6	187·4	0·9
192	189·4	189·2	188·9	188·7	188·4	0·9
193	190·5	190·2	190·0	189·7	189·5	0·9
194	191·5	191·3	191·0	190·8	190·6	0·9
195	192·6	192·3	192·1	191·8	191·6	0·9
196	193·6	193·4	193·1	192·9	192·7	0·9
197	194·6	194·4	194·1	193·9	193·7	0·9
198	195·7	195·5	195·2	195·0	194·8	0·9
199	196·7	196·5	196·3	196·1	195·9	0·9
200	197·7	197·5	197·3	197·1	196·9	0·9

TRUE PER CENT.

Ind. 3 to 25. **Temp. 76° to 80°.**

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	Subt.
3	0·7	0·5	0·3	0·1	· ·	0·3
4	1·7	1·5	1·4	1·2	1·0	0·3
5	2·7	2·5	2·4	2·2	2·0	0·3
6	3·7	3·5	3·3	3·1	2·9	0·3
7	4·6	4·4	4·3	4·1	3·9	0·3
8	5·6	5·4	5·2	5·0	4·8	0·3
9	6·6	6·4	6·2	6·0	5·8	0·3
10	7·5	7·3	7·1	6·9	6·7	0·3
11	8·5	8·3	8·1	7·9	7·7	0·3
12	9·4	9·2	9·0	8·8	8·6	0·3
13	10·3	10·1	9·8	9·6	9·4	0·3
14	11·2	11·0	10·7	10·5	10·3	0·3
15	12·1	11·9	11·6	11·4	11·2	0·3
16	13·1	12·8	12·6	12·3	12·1	0·3
17	14·1	13·8	13·6	13·3	13·1	0·3
18	15·0	14·8	14·5	14·3	14·1	0·3
19	16·0	15·7	15·5	15·2	15·0	0·3
20	16·9	16·7	16·4	16·2	16·0	0·3
21	17·8	17·5	17·3	17·0	16·8	0·3
22	18·6	18·4	18·1	17·9	17·6	0·3
23	19·5	19·2	19·0	18·7	18·5	0·3
24	20·3	20·1	19·8	19·6	19·3	0·3
25	21·2	21·0	20·7	20·5	20·2	0·3

TRUE PER CENT.

Ind. 26 to 50. Temp. 76° to 80°.

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
26	22·2	21·9	21·7	21·4	21·1	0·3
27	23·1	22·8	22·6	22·3	22·0	0·3
28	24·0	23·7	23·5	23·2	22·9	0·3
29	24·9	24·6	24·4	24·1	23·8	0·3
30	25·8	25·5	25·3	25·0	24·7	0·3
31	26·7	26·4	26·1	25·8	25·5	0·3
32	27·6	27·3	27·0	26·7	26·4	0·3
33	28·5	28·2	27·8	27·5	27·2	0·3
34	29·4	29·1	28·7	28·4	28·1	0·3
35	30·3	30·0	29·6	29·3	29·0	0·3
36	31·2	30·8	30·5	30·1	29·8	0·4
37	32·1	31·7	31·4	31·0	30·7	0·4
38	32·9	32·6	32·2	31·9	31·5	0·4
39	33·8	33·5	33·1	32·8	32·4	0·4
40	34·7	34·4	34·0	33·7	33·3	0·4
41	35·6	35·3	34·9	34·6	34·2	0·4
42	36·5	36·1	35·8	35·4	35·1	0·4
43	37·3	37·0	36·6	36·3	35·9	0·4
44	38·1	37·8	37·4	37·1	36·7	0·4
45	39·0	38·7	38·3	38·0	37·6	0·4
46	39·8	39·4	39·1	38·7	38·4	0·4
47	40·7	40·3	40·0	39·6	39·2	0·5
48	41·6	41·2	40·8	40·4	40·0	0·5
49	42·4	42·0	41·7	41·3	40·9	0·5
50	43·3	42·9	42·5	42·1	41·7	0·5

TRUE PER CENT.

Ind. 51 to 75. **Temp. 76° to 80°.**

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
51	44·2	43·8	43·3	42·9	42·5	0·5
52	45·2	44·7	44·3	43·8	43·4	0·5
53	46·1	45·7	45·2	44·8	44·3	0·5
54	47·1	46·6	46·2	45·7	45·3	0·5
55	48·0	47·6	47·1	46·7	46·2	0·5
56	49·0	48·6	48·1	47·7	47·2	0·5
57	50·0	49·6	49·1	48·7	48·2	0·5
58	51·0	50·5	50·1	49·6	49·2	0·5
59	52·0	51·5	51·1	50·6	50·2	0·5
60	52·9	52·4	52·0	51·5	51·1	0·5
61	53·9	53·4	53·0	52·5	52·1	0·5
62	54·8	54·4	53·9	53·5	53·0	0·5
63	55·8	55·4	54·9	54·5	54·0	0·6
64	56·8	56·3	55·9	55·4	55·0	0·6
65	57·8	57·3	56·9	56·4	56·0	0·6
66	58·7	58·3	57·8	57·4	56·9	0·6
67	59·7	59·3	58·8	58·4	57·9	0·6
68	60·7	60·3	59·8	59·4	58·9	0·6
69	61·7	61·3	60·8	60·4	59·9	0·6
70	62·7	62·3	61·8	61·4	60·9	0·6
71	63·7	63·3	62·8	62·4	61·9	0·6
72	64·7	64·3	63·8	63·4	62·9	0·6
73	65·7	65·3	64·8	64·4	63·9	0·7
74	66·7	66·3	65·8	65·4	64·9	0·7
75	67·7	67·3	66·8	66·4	65·9	0·7

TRUE PER CENT.

Ind. 76 to 100. Temp. 76° to 80°.

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	Subt.
76	68·7	68·3	67·8	67·4	66·9	0·7
77	69·7	69·3	68·8	68·4	67·9	0·7
78	70·7	70·3	69·8	69·4	68·9	0·7
79	71·7	71·3	70·8	70·4	69·9	0·7
80	72·7	72·3	71·8	71·4	70·9	0·7
81	73·7	73·3	72·8	72·4	71·9	0·7
82	74·7	74·3	73·8	73·4	72·9	0·7
83	75·8	75·3	74·9	74·4	73·9	0·8
84	76·8	76·4	75·9	75·5	75·0	0·8
85	77·8	77·4	76·9	76·5	76·0	0·8
86	78·8	78·4	77·9	77·5	77·0	0·8
87	79·9	79·5	79·0	78·6	78·1	0·8
88	81·0	80·5	80·1	79·6	79·2	0·8
89	82·0	81·5	81·1	80·6	80·2	0·8
90	83·0	82·5	82·1	81·6	81·2	0·8
91	84·0	83·6	83·1	82·7	82·2	0·8
92	85·0	84·6	84·1	83·7	83·2	0·8
93	86·1	85·6	85·2	84·7	84·3	0·8
94	87·1	86·6	86·2	85·7	85·3	0·8
95	88·1	87·6	87·2	86·7	86·3	0·8
96	89·1	88·7	88·2	87·8	87·3	0·8
97	90·1	89·7	89·2	88·8	88·3	0·9
98	91·2	90·7	90·3	89·8	89·4	0·9
99	92·2	91·7	91·3	90·8	90·4	0·9
100	93·3	92·8	92·4	91·9	91·5	0·9

TRUE PER CENT.

Ind. 101 to 125. Temp. 76° to 80°.

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
101	94·3	93·8	93·4	92·9	92·5	0·9
102	95·3	94·8	94·4	93·9	93·5	0·9
103	96·3	95·9	95·4	95·0	94·6	0·9
104	97·3	96·9	96·4	96·0	95·6	0·9
105	98·4	98·0	97·5	97·1	96·7	0·9
106	99·4	99·0	98·5	98·1	97·7	0·9
107	100·5	100·0	99·6	99·1	98·7	0·9
108	101·5	101·1	100·6	100·2	99·8	0·9
109	102·5	102·1	101·6	101·2	100·8	0·9
110	103·5	103·1	102·7	102·3	101·9	0·9
111	104·5	104·1	103·7	103·3	102·9	0·9
112	105·5	105·1	104·7	104·3	103·9	0·9
113	106·6	106·2	105·7	105·3	104·9	0·9
114	107·6	107·2	106·7	106·3	105·9	0·9
115	108·6	108·2	107·7	107·3	106·9	0·9
116	109·6	109·2	108·7	108·3	107·9	1·0
117	110·6	110·2	109·7	109·3	108·9	1·0
118	111·6	111·2	110·7	110·3	109·9	1·0
119	112·7	112·3	111·8	111·4	111·0	1·0
120	113·7	113·3	112·9	112·5	112·1	1·0
121	114·7	114·3	113·9	113·5	113·1	1·0
122	115·8	115·4	114·9	114·5	114·1	1·0
123	116·8	116·4	116·0	115·6	115·2	1·0
124	117·8	117·4	117·0	116·6	116·2	1·0
125	118·8	118·4	118·0	117·6	117·2	1·0

TRUE PER CENT.

Ind. 126 to 150. Temp. 76° to 80°.

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
126	119·8	119·4	119·0	118·6	118·2	1·0
127	120·8	120·4	120·0	119·6	119·2	1·0
128	121·8	121·4	121·0	120·6	120·2	1·0
129	122·8	122·4	122·0	121·6	121·2	1·0
130	123·8	123·4	123·0	122·6	122·2	1·0
131	124·8	124·4	124·0	123·6	123·2	1·0
132	125·9	125·5	125·1	124·7	124·3	1·0
133	126·9	126·5	126·1	125·7	125·3	1·0
134	127·9	127·5	127·2	126·8	126·4	1·0
135	129·0	128·6	128·2	127·8	127·4	1·0
136	130·0	129·6	129·3	128·9	128·5	1·0
137	131·0	130·6	130·3	129·9	129·5	1·0
138	132·0	131·6	131·3	130·9	130·5	1·0
139	133·0	132·6	132·3	131·9	131·5	1·0
140	134·1	133·7	133·4	133·0	132·6	1·0
141	135·1	134·7	134·4	134·0	133·6	1·0
142	136·1	135·8	135·4	135·1	134·7	1·0
143	137·1	136·8	136·4	136·1	135·7	1·0
144	138·2	137·8	137·5	137·1	136·7	1·0
145	139·2	138·8	138·5	138·1	137·7	1·1
146	140·2	139·8	139·5	139·1	138·7	1·1
147	141·2	140·8	140·5	140·1	139·7	1·1
148	142·2	141·9	141·5	141·2	140·8	1·1
149	143·3	142·9	142·6	142·2	141·8	1·1
150	144·3	143·9	143·6	143·2	142·8	1·1

TRUE PER CENT.

Ind. 151 to 175. **Temp. 76° to 80°.**

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
151	145·3	145·0	144·6	144·3	143·9	1·1
152	146·3	146·0	145·6	145·3	144·9	1·1
153	147·4	147·0	146·7	146·3	145·9	1·1
154	148·4	148·0	147·7	147·3	146·9	1·1
155	149·4	149·1	148·7	148·4	148·0	1·1
156	150·4	150·1	149·7	149·4	149·0	1·1
157	151·5	151·1	150·8	150·4	150·0	1·1
158	152·5	152·2	151·8	151·5	151·1	1·1
159	153·5	153·2	152·8	152·5	152·1	1·1
160	154·6	154·2	153·9	153·5	153·2	1·1
161	155·6	155·3	154·9	154·6	154·2	1·1
162	156·7	156·3	156·0	155·6	155·3	1·1
163	157·7	157·3	157·0	156·6	156·3	1·1
164	158·7	158·3	158·0	157·6	157·3	1·1
165	159·8	159·4	159·1	158·7	158·4	1·1
166	160·8	160·4	160·1	159·7	159·4	1·1
167	161·8	161·4	161·1	160·7	160·4	1·1
168	162·8	162·5	162·1	161·8	161·5	1·1
169	163·9	163·5	163·2	162·8	162·5	1·1
170	164·9	164·5	164·2	163·8	163·5	1·1
171	165·9	165·6	165·2	164·9	164·6	1·1
172	166·9	166·6	166·2	165·9	165·6	1·1
173	168·0	167·7	167·3	167·0	166·7	1·1
174	169·0	168·7	168·3	168·0	167·7	1·1
175	170·1	169·8	169·4	169·1	168·8	1·1

TRUE PER CENT.

Ind. 176 to 200. Temp. 76° to 80°.

Indication.	TEMPERATURES.					Corr. to vol.
	76°	77°	78°	79°	80°	
						Subt.
176	171·1	170·8	170·4	170·1	169·8	1·1
177	172·2	171·9	171·5	171·2	170·9	1·1
178	173·2	172·9	172·6	172·3	172·0	1·1
179	174·3	174·0	173·6	173·3	173·0	1·1
180	175·3	175·0	174·7	174·4	174·1	1·1
181	176·4	176·1	175·8	175·5	175·2	1·1
182	177·4	177·1	176·8	176·5	176·2	1·2
183	178·5	178·2	177·9	177·6	177·3	1·2
184	179·5	179·2	179·0	178·7	178·4	1·2
185	180·5	180·2	180·0	179·7	179·4	1·2
186	181·6	181·3	181·1	180·8	180·5	1·2
187	182·7	182·4	182·1	181·8	181·5	1·2
188	183·8	183·5	183·2	182·9	182·6	1·2
189	184·9	184·6	184·4	184·1	183·8	1·2
190	186·0	185·8	185·5	185·3	185·0	1·2
191	187·1	186·9	186·6	186·4	186·1	1·2
192	188·2	187·9	187·7	187·4	187·2	1·2
193	189·3	189·0	188·8	188·5	188·3	1·2
194	190·4	190·1	189·9	189·6	189·4	1·2
195	191·4	191·2	190·9	190·7	190·5	1·2
196	192·5	192·2	192·0	191·7	191·5	1·2
197	193·5	193·3	193·0	192·8	192·6	1·2
198	194·6	194·4	194·1	193·9	193·7	1·2
199	195·7	195·4	195·2	194·9	194·7	1·2
200	196·7	196·5	196·2	196·0	195·8	1·2

TRUE PER CENT.

Ind. 4 to 25. Temp. 81° to 85°.

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	Subt.
4	0·8	0·5	0·3	0·0	· ·	0·3
5	1·8	1·5	1·3	1·0	0·8	0·4
6	2·7	2·5	2·2	2·0	1·8	0·4
7	3·7	3·4	3·2	2·9	2·7	0·4
8	4·6	4·4	4·1	3·9	3·7	0·4
9	5·6	5·4	5·1	4·9	4·7	0·4
10	6·5	6·3	6·0	5·8	5·6	0·4
11	7·5	7·2	7·0	6·7	6·5	0·4
12	8·4	8·1	7·9	7·6	7·4	0·4
13	9·2	9·0	8·7	8·5	8·3	0·4
14	10·1	9·8	9·6	9·3	9·1	0·4
15	11·0	10·7	10·5	10·2	10·0	0·4
16	11·9	11·6	11·4	11·1	10·9	0·4
17	12·8	12·6	12·3	12·1	11·8	0·4
18	13·8	13·5	13·3	13·0	12·7	0·4
19	14·7	14·5	14·2	14·0	13·7	0·4
20	15·7	15·4	15·2	14·9	14·6	0·4
21	16·5	16·2	16·0	15·7	15·4	0·4
22	17·3	17·1	16·8	16·6	16·3	0·4
23	18·2	17·9	17·7	17·4	17·1	0·4
24	19·0	18·8	18·5	18·3	18·0	0·4
25	19·9	19·6	19·4	19·1	18·8	0·4

TRUE PER CENT.

Ind. 26 to 50. Temp. 81° to 85°

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	Subt.
26	20·8	20·5	20·3	20·0	19·7	0·4
27	21·7	21·4	21·1	20·8	20·5	0·4
28	22·6	22·3	22·0	21·7	21·4	0·4
29	23·5	23·2	22·9	22·6	22·3	0·4
30	24·4	24·1	23·7	23·4	23·1	0·4
31	25·2	24·9	24·6	24·3	24·0	0·4
32	26·1	25·8	25·4	25·1	24·8	0·4
33	26·9	26·6	26·2	25·9	25·6	0·4
34	27·8	27·5	27·1	26·8	26·5	0·4
35	28·7	28·3	28·0	27·6	27·3	0·4
36	29·5	29·1	28·8	28·4	28·1	0·5
37	30·4	30·0	29·7	29·3	29·0	0·5
38	31·2	30·8	30·5	30·1	29·8	0·5
39	32·1	31·7	31·4	31·0	30·7	0·5
40	32·9	32·6	32·2	31·9	31·5	0·5
41	33·8	33·5	33·1	32·8	32·4	0·5
42	34·7	34·3	34·0	33·6	33·2	0·5
43	35·5	35·2	34·8	34·5	34·1	0·5
44	36·3	36·0	35·6	35·3	34·9	0·5
45	37·2	36·9	36·5	36·2	35·8	0·5
46	38·0	37·7	37·3	37·0	36·6	0·5
47	38·8	38·5	38·1	37·8	37·4	0·5
48	39·6	39·3	38·9	38·6	38·2	0·5
49	40·5	40·1	39·8	39·4	39·0	0·6
50	41·3	40·9	40·6	40·2	39·8	0·6

TRUE PER CENT.

Ind. 51 to 75. Temp. 81° to 85°.

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
51	42·1	41·7	41·4	41·0	40·6	0·6
52	43·0	42·6	42·2	41·8	41·4	0·6
53	43·9	43·5	43·0	42·6	42·2	0·6
54	44·8	44·4	43·9	43·5	43·0	0·6
55	45·7	45·2	44·8	44·3	43·8	0·6
56	46·7	46·2	45·8	45·3	44·8	0·6
57	47·7	47·2	46·8	46·3	45·8	0·6
58	48·7	48·2	47·8	47·3	46·8	0·6
59	49·7	49·2	48·8	48·3	47·8	0·7
60	50·6	50·2	49·7	49·3	48·8	0·7
61	51·6	51·2	50·7	50·3	49·8	0·7
62	52·6	52·1	51·7	51·2	50·8	0·7
63	53·5	53·1	52·6	52·2	51·7	0·7
64	54·5	54·1	53·6	53·2	52·7	0·7
65	55·5	55·1	54·6	54·2	53·7	0·7
66	56·5	56·0	55·6	55·1	54·7	0·7
67	57·4	57·0	56·5	56·1	55·6	0·7
68	58·4	58·0	57·5	57·1	56·6	0·7
69	59·4	59·0	58·5	58·1	57·6	0·8
70	60·4	60·0	59·5	59·1	58·6	0·8
71	61·4	61·0	60·5	60·1	59·6	0·8
72	62·5	62·0	61·6	61·1	60·7	0·8
73	63·5	63·0	62·6	62·1	61·7	0·8
74	64·5	64·0	63·6	63·1	62·7	0·8
75	65·5	65·0	64·6	64·1	63·7	0·8

TRUE PER CENT.

Ind. 76 to 100. Temp. 81° to 85°.

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
76	66·5	66·0	65·6	65·1	64·7	0·8
77	67·5	67·0	66·6	66·1	65·7	0·9
78	68·5	68·0	67·6	67·1	66·7	0·9
79	69·5	69·0	68·6	68·1	67·7	0·9
80	70·5	70·0	69·6	69·1	68·7	0·9
81	71·5	71·0	70·6	70·1	69·7	0·9
82	72·5	72·0	71·6	71·1	70·7	0·9
83	73·5	73·0	72·6	72·1	71·7	0·9
84	74·5	74·1	73·6	73·2	72·7	0·9
85	75·5	75·1	74·6	74·2	73·7	1·0
86	76·5	76·1	75·6	75·2	74·7	1·0
87	77·6	77·1	76·7	76·2	75·7	1·0
88	78·7	78·2	77·8	77·3	76·8	1·0
89	79·7	79·2	78·8	78·3	77·8	1·0
90	80·7	80·3	79·8	79·4	78·9	1·0
91	81·8	81·3	80·9	80·4	80·0	1·0
92	82·8	82·4	81·9	81·5	81·1	1·0
93	83·9	83·4	83·0	82·5	82·1	1·0
94	84·9	84·4	84·0	83·5	83·1	1·0
95	85·9	85·4	85·0	84·5	84·1	1·0
96	86·9	86·4	86·0	85·5	85·1	1·0
97	87·9	87·4	87·0	86·5	86·1	1·1
98	88·9	88·5	88·0	87·6	87·1	1·1
99	90·0	89·5	89·1	88·6	88·2	1·1
100	91·0	90·6	90·1	89·7	89·2	1·1

TRUE PER CENT.

Ind. 101 to 125. Temp. 81° to 85°.

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
101	92·1	91·6	91·2	90·7	90·3	1·1
102	93·1	92·7	92·2	91·8	91·4	1·1
103	94·2	93·7	93·3	92·8	92·4	1·1
104	95·2	94·8	94·3	93·9	93·5	1·1
105	96·3	95·8	95·4	94·9	94·5	1·1
106	97·3	96·8	96·4	95·9	95·5	1·1
107	98·3	97·9	97·4	97·0	96·6	1·1
108	99·4	98·9	98·5	98·0	97·6	1·1
109	100·4	100·0	99·5	99·1	98·7	1·1
110	101·5	101·0	100·6	100·1	99·7	1·1
111	102·5	102·1	101·6	101·2	100·8	1·1
112	103·5	103·1	102·6	102·2	101·8	1·2
113	104·5	104·1	103·6	103·2	102·8	1·2
114	105·5	105·1	104·7	104·3	103·9	1·2
115	106·5	106·1	105·7	105·3	104·9	1·2
116	107·5	107·1	106·7	106·3	105·9	1·2
117	108·5	108·1	107·7	107·3	106·9	1·2
118	109·5	109·1	108·7	108·3	107·9	1·2
119	110·6	110·2	109·7	109·3	108·9	1·2
120	111·7	111·2	110·8	110·3	109·9	1·2
121	112·7	112·3	111·8	111·4	111·0	1·2
122	113·7	113·3	112·9	112·5	112·1	1·2
123	114·8	114·4	113·9	113·5	113·1	1·2
124	115·8	115·4	115·0	114·6	114·2	1·2
125	116·8	116·4	116·0	115·6	115·2	1·2

TRUE PER CENT.

Ind. 126 to 150. **Temp. 81° to 85°.**

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
126	117·8	117·4	117·0	116·6	116·2	1·2
127	118·8	118·4	118·1	117·7	117·3	1·2
128	119·8	119·4	119·1	118·7	118·3	1·2
129	120·8	120·4	120·1	119·7	119·3	1·2
130	121·8	121·4	121·1	120·7	120·3	1·2
131	122·8	122·4	122·1	121·7	121·3	1·2
132	123·9	123·5	123·1	122·7	122·3	1·3
133	124·9	124·5	124·1	123·7	123·3	1·3
134	126·0	125·6	125·2	124·8	124·4	1·3
135	127·0	126·6	126·2	125·8	125·4	1·3
136	128·1	127·7	127·3	126·9	126·5	1·3
137	129·1	128·7	128·3	127·9	127·5	1·3
138	130·1	129·7	129·4	129·0	128·6	1·3
139	131·1	130·7	130·4	130·0	129·6	1·3
140	132·2	131·8	131·5	131·1	130·7	1·3
141	133·2	132·8	132·5	132·1	131·7	1·3
142	134·3	133·9	133·5	133·1	132·7	1·3
143	135·3	134·9	134·6	134·2	133·8	1·3
144	136·3	135·9	135·6	135·2	134·8	1·3
145	137·3	136·9	136·6	136·2	135·8	1·3
146	138·3	138·0	137·6	137·3	136·9	1·3
147	139·3	139·0	138·6	138·3	137·9	1·3
148	140·4	140·0	139·7	139·3	138·9	1·3
149	141·4	141·1	140·7	140·4	140·0	1·3
150	142·4	142·1	141·7	141·4	141·0	1·3

TRUE PER CENT.

Ind. 151 to 175. **Temp. 81° to 85°.**

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
151	143·5	143·1	142·8	142·4	142·0	1·3
152	144·5	144·2	143·8	143·5	143·1	1·3
153	145·5	145·2	144·8	144·5	144·1	1·3
154	146·5	146·2	145·8	145·5	145·1	1·3
155	147·6	147·3	146·9	146·6	146·2	1·3
156	148·6	148·3	147·9	147·6	147·2	1·3
157	149·7	149·3	149·0	148·6	148·3	1·4
158	150·7	150·4	150·0	149·7	149·3	1·4
159	151·8	151·4	151·1	150·7	150·4	1·4
160	152·8	152·5	152·1	151·8	151·4	1·4
161	153·9	153·5	153·2	152·8	152·5	1·4
162	154·9	154·6	154·2	153·9	153·5	1·4
163	156·0	155·6	155·3	154·9	154·6	1·4
164	157·0	156·6	156·3	155·9	155·6	1·4
165	158·0	157·7	157·3	157·0	156·6	1·4
166	159·1	158·7	158·4	158·0	157·7	1·4
167	160·1	159·7	159·4	159·0	158·7	1·4
168	161·1	160·8	160·4	160·1	159·7	1·4
169	162·2	161·8	161·5	161·1	160·8	1·4
170	163·2	162·8	162·5	162·1	161·8	1·4
171	164·3	163·9	163·6	163·2	162·9	1·4
172	165·3	165·0	164·6	164·3	164·0	1·4
173	166·4	166·0	165·7	165·3	165·0	1·4
174	167·4	167·1	166·7	166·4	166·1	1·4
175	168·5	168·2	167·8	167·5	167·2	1·4

TRUE PER CENT.

Ind. 176 to 200. Temp. 81° to 85°.

Indication.	TEMPERATURES.					Corr. to vol.
	81°	82°	83°	84°	85°	
						Subt.
176	169·5	169·2	168·9	168·6	168·3	1·4
177	170·6	170·3	169·9	169·6	169·3	1·4
178	171·7	171·4	171·0	170·7	170·4	1·4
179	172·7	172·4	172·1	171·8	171·5	1·4
180	173·8	173·5	173·2	172·9	172·6	1·4
181	174·9	174·6	174·3	174·0	173·7	1·4
182	175·9	175·6	175·3	175·0	174·7	1·4
183	177·0	176·7	176·4	176·1	175·8	1·4
184	178·1	177·8	177·5	177·2	176·9	1·4
185	179·1	178·8	178·6	178·3	178·0	1·5
186	180·2	179·9	179·6	179·3	179·0	1·5
187	181·2	180·9	180·7	180·4	180·1	1·5
188	182·3	182·0	181·8	181·5	181·2	1·5
189	183·5	183·2	183·0	182·7	182·4	1·5
190	184·7	184·4	184·1	183·8	183·5	1·5
191	185·8	185·5	185·2	184·9	184·6	1·5
192	186·9	186·6	186·4	186·1	185·8	1·5
193	188·0	187·8	187·5	187·3	187·0	1·5
194	189·1	188·9	188·6	188·4	188·1	1·5
195	190·2	190·0	189·7	189·5	189·2	1·5
196	191·3	191·0	190·8	190·5	190·3	1·5
197	192·4	192·1	191·9	191·6	191·4	1·5
198	193·5	193·2	193·0	192·7	192·5	1·5
199	194·5	194·3	194·0	193·8	193·6	1·5
200	195·6	195·4	195·1	194·9	194·7	1·5

TRUE PER CENT.

Ind. 5 to 25. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	Subt.
5	0·6	0·3	0·1	· ·	· ·	0·4
6	1·6	1·3	1·1	0·8	0·6	0·4
7	2·5	2·2	2·0	1·7	1·5	0·4
8	3·5	3·2	3·0	2·7	2·5	0·4
9	4·5	4·2	4·0	3·7	3·5	0·4
10	5·4	5·1	4·9	4·6	4·4	0·4
11	6·3	6·0	5·8	5·5	5·3	0·5
12	7·2	6·9	6·7	6·4	6·2	0·5
13	8·0	7·8	7·5	7·3	7·0	0·5
14	8·9	8·6	8·4	8·1	7·9	0·5
15	9·7	9·5	9·2	9·0	8·7	0·5
16	10·6	10·4	10·1	9·9	9·6	0·5
17	11·5	11·3	11·0	10·8	10·5	0·5
18	12·4	12·1	11·9	11·6	11·3	0·5
19	13·4	13·1	12·8	12·5	12·2	0·5
20	14·3	14·0	13·7	13·4	13·1	0·5
21	15·1	14·8	14·6	14·3	14·0	0·5
22	16·0	15·7	15·4	15·1	14·8	0·5
23	16·8	16·5	16·3	16·0	15·7	0·5
24	17·7	17·4	17·1	16·8	16·5	0·5
25	18·5	18·2	17·9	17·6	17·3	0·5

TRUE PER CENT.

Ind. 26 to 50. Temp. 86° to 90°

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	Subt.
26	19·4	19·1	18·8	18·5	18·2	0·5
27	20·2	19·9	19·6	19·3	19·0	0·5
28	21·1	20·8	20·4	20·1	19·8	0·5
29	22·0	21·7	21·3	21·0	20·7	0·5
30	22·8	22·5	22·1	21·8	21·5	0·5
31	23·7	23·3	23·0	22·6	22·3	0·5
32	24·5	24·1	23·8	23·4	23·1	0·5
33	25·3	25·0	24·6	24·3	24·0	0·5
34	26·2	25·8	25·5	25·1	24·8	0·5
35	27·0	26·6	26·3	25·9	25·6	0·6
36	27·8	27·4	27·1	26·7	26·4	0·6
37	28·6	28·3	27·9	27·6	27·2	0·6
38	29·5	29·1	28·8	28·4	28·1	0·6
39	30·3	30·0	29·6	29·3	28·9	0·6
40	31·1	30·8	30·4	30·1	29·7	0·6
41	32·0	31·6	31·2	30·8	30·4	0·6
42	32·8	32·4	32·1	31·7	31·3	0·6
43	33·7	33·3	32·9	32·5	32·1	0·6
44	34·5	34·1	33·8	33·4	33·0	0·6
45	35·4	35·0	34·7	34·3	33·9	0·6
46	36·2	35·8	35·5	35·1	34·7	0·6
47	37·0	36·6	36·3	35·9	35·5	0·6
48	37·8	37·4	37·1	36·7	36·3	0·6
49	38·6	38·2	37·9	37·5	37·1	0·7
50	39·4	39·0	38·7	38·3	37·9	0·7

TRUE PER CENT.

Ind 51 to 75. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	Subt.
51	40·2	39·8	39·4	39·0	38·6	0·7
52	41·0	40·6	40·2	39·8	39·4	0·7
53	41·8	41·4	41·0	40·6	40·2	0·7
54	42·6	42·2	41·8	41·4	41·0	0·7
55	43·4	43·0	42·6	42·2	41·8	0·8
56	44·4	43·9	43·5	43·0	42·6	0·8
57	45·3	44·8	44·4	43·9	43·4	0·8
58	46·3	45·8	45·3	44·8	44·3	0·8
59	47·3	46·8	46·3	45·8	45·3	0·8
60	48·3	47·8	47·3	46·8	46·3	0·8
61	49·3	48·8	48·3	47·8	47·3	0·8
62	50·3	49·8	49·3	48·8	48·3	0·8
63	51·2	50·7	50·3	49·8	49·3	0·8
64	52·2	51·7	51·3	50·8	50·3	0·8
65	53·2	52·7	52·3	51·8	51·3	0·8
66	54·2	53·7	53·3	52·8	52·3	0·8
67	55·1	54·7	54·2	53·8	53·3	0·9
68	56·1	55·7	55·2	54·8	54·3	0·9
69	57·1	56·7	56·2	55·8	55·3	0·9
70	58·1	57·7	57·2	56·8	56·3	0·9
71	59·1	58·7	58·2	57·8	57·3	0·9
72	60·2	59·7	59·3	58·8	58·3	0·9
73	61·2	60·7	60·3	59·8	59·3	0·9
74	62·2	61·8	61·3	60·9	60·4	1·0
75	63·2	62·8	62·3	61·9	61·4	1·0

TRUE PER CENT.

Ind. 76 to 100. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	
						Subt.
76	64·2	63·8	63·3	62·9	62·4	1·0
77	65·2	64·8	64·3	63·9	63·4	1·0
78	66·2	65·8	65·3	64·9	64·4	1·0
79	67·3	66·8	66·4	65·9	65·5	1·0
80	68·3	67·8	67·4	66·9	66·5	1·1
81	69·3	68·8	68·4	67·9	67·5	1·1
82	70·3	69·8	69·4	68·9	68·5	1·1
83	71·3	70·8	70·4	69·9	69·5	1·1
84	72·3	71·8	71·4	70·9	70·5	1·1
85	73·3	72·8	72·4	71·9	71·5	1·1
86	74·3	73·8	73·4	72·9	72·5	1·1
87	75·3	74·8	74·4	73·9	73·5	1·2
88	76·3	75·9	75·4	75·0	74·5	1·2
89	77·3	76·9	76·4	76·0	75·5	1·2
90	78·4	77·9	77·5	77·0	76·5	1·2
91	79·5	79·0	78·6	78·1	77·6	1·2
92	80·6	80·1	79·7	79·2	78·7	1·2
93	81·6	81·2	80·7	80·3	79·8	1·2
94	82·7	82·2	81·8	81·3	80·9	1·2
95	83·7	83·2	82·8	82·3	81·9	1·2
96	84·7	84·3	83·8	83·4	83·0	1·2
97	85·7	85·3	84·8	84·4	84·0	1·3
98	86·7	86·3	85·8	85·4	85·0	1 3
99	87·8	87·3	86·9	86·4	86·0	1·3
100	88 8	88·3	87·9	87·4	87·0	1·3

TRUE PER CENT.

Ind. 101 to 125. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	
						Subt.
101	89·8	89·4	88·9	88·5	88·0	1·3
102	90·9	90·5	90·0	89·6	89·1	1·3
103	92·0	91·5	91·1	90·6	90·2	1·3
104	93·1	92·6	92·2	91·7	91·3	1·3
105	94·1	93·6	93·2	92·7	92·3	1·3
106	95·1	94·7	94·2	93·8	93·4	1·3
107	96·2	95·7	95·3	94·8	94·4	1·3
108	97·2	96·8	96·3	95·9	95·5	1·4
109	98·3	97·8	97·4	96·9	96·5	1·4
110	99·3	98·9	98·4	98·0	97·6	1·4
111	100·4	99·9	99·5	99·0	98·6	1·4
112	101·4	101·0	100·5	100·1	99·7	1·4
113	102·4	102·0	101·5	101·1	100·7	1·4
114	103·5	103·1	102·6	102·2	101·8	1·4
115	104·5	104·1	103·6	103·2	102·8	1·4
116	105·5	105·1	104·6	104·2	103·8	1·4
117	106·5	106·1	105·6	105·2	104·8	1·4
118	107·5	107·1	106·7	106·3	105·9	1·4
119	108·5	108·1	107·7	107·3	106·9	1·4
120	109·5	109·1	108·7	108·3	107·9	1·4
121	110·6	110·2	109·7	109·3	108·9	1·4
122	111·7	111·2	110·8	110·3	109·9	1·5
123	112·7	112·3	111·8	111·4	111·0	1·5
124	113·8	113·4	112·9	112·5	112·1	1·5
125	114·8	114·4	113·9	113·5	113·1	1·5

TRUE PER CENT.

Ind. 126 to 150. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	
						Subt.
126	115·8	115·4	115·0	114·6	114·2	1·5
127	116·9	116·5	116·0	115·6	115·2	1·5
128	117·9	117·5	117·1	116·7	116·3	1·5
129	118·9	118·5	118·1	117·7	117·3	1·5
130	119·9	119·5	119·1	118·7	118·3	1·5
131	120·9	120·5	120·1	119·7	119·3	1·5
132	121·9	121·5	121·1	120·7	120·3	1·5
133	122·9	122·5	122·2	121·8	121·4	1·5
134	124·0	123·6	123·2	122·8	122·4	1·5
135	125·0	124·6	124·2	123·8	123·4	1·5
136	126·1	125·7	125·2	124·8	124·4	1·5
137	127·1	126·7	126·3	125·9	125·5	1·5
138	128·2	127·8	127·4	127·0	126·6	1·5
139	129·2	128·8	128·5	128·1	127·7	1·5
140	130·3	129·9	129·6	129·2	128·8	1·5
141	131·3	130·9	130·6	130·2	129·8	1·5
142	132·3	132·0	131·6	131·3	130·9	1·5
143	133·4	133·0	132·7	132·3	131·9	1·6
144	134·4	134·0	133·7	133·3	132·9	1·6
145	135·4	135·0	134·7	134·3	133·9	1·6
146	136·5	136·1	135·7	135·3	134·9	1·6
147	137·5	137·1	136·7	136·3	135·9	1 6
148	138·5	138·1	137·8	137·4	137·0	1·6
149	139·6	139·2	138·8	138·4	138·0	1·6
150	140·6	140·2	139·9	139·5	139·1	1·6

TRUE PER CENT.

Ind. 151 to 175. **Temp. 86° to 90°.**

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	
						Subt.
151	141·6	141·2	140·9	140·5	140·1	1·6
152	142·7	142·3	142·0	141·6	141·2	1·6
153	143·7	143·3	143·0	142·6	142·2	1·6
154	144·7	144·4	144·0	143·7	143·3	1·6
155	145·8	145·4	145·1	144·7	144·3	1·6
156	146·8	146·5	146·1	145·8	145·4	1·6
157	147·9	147·5	147·2	146·8	146·4	1·6
158	148·9	148·6	148·2	147·9	147·5	1·6
159	150·0	149·6	149·3	148·9	148·5	1·6
160	151·0	150·7	150·3	150·0	149·6	1·6
161	152·1	151·7	151·4	151·0	150·6	1·6
162	153·1	152·8	152·4	152·1	151·7	1·6
163	154·2	153·9	153·5	153·2	152·8	1·6
164	155·2	154·9	154·5	154·2	153·8	1·7
165	156·3	155·9	155·6	155·2	154·9	1·7
166	157·3	157·0	156·6	156·3	155·9	1·7
167	158·4	158·0	157·7	157·3	157·0	1·7
168	159·4	159·0	158·7	158·3	158·0	1·7
169	160·5	160·1	159·8	159·4	159·1	1·7
170	161·5	161·1	160·8	160·4	160·1	1·7
171	162·6	162·2	161·9	161·5	161·2	1·7
172	163·7	163·3	163·0	162·6	162·3	1·7
173	164·7	164·3	164·0	163·6	163·3	1·7
174	165·8	165·4	165·1	164·7	164·4	1·7
175	166·9	166·5	166·2	165·8	165·5	1·7

TRUE PER CENT.

Ind. 176 to 200. Temp. 86° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	86°	87°	88°	89°	90°	
						Subt.
176	168·0	167·6	167·3	166·9	166·6	1·7
177	169·0	168·7	168·3	168·0	167·7	1·7
178	170·1	169·8	169·4	169·1	168·8	1·7
179	171·2	170·9	170·5	170·2	169·9	1·7
180	172·3	172·0	171·6	171·3	171·0	1·7
181	173·4	173·1	172·7	172·4	172·1	1·7
182	174·4	174·1	173·8	173·5	173·2	1·7
183	175·5	175·2	174·9	174·6	174·3	1·7
184	176·6	176·3	176·0	175·7	175·4	1·7
185	177·7	177·4	177·0	176·7	176·4	1·7
186	178·7	178·4	178·1	177·8	177·5	1·7
187	179·8	179·5	179·2	178·9	178·6	1·7
188	180·9	180·6	180·4	180·1	179·8	1·8
189	182·1	181·8	181·5	181·2	180·9	1·8
190	183·2	182·9	182·7	182·4	182·1	1·8
191	184·3	184·0	183·8	183·5	183·2	1·8
192	185·5	185·2	185·0	184·7	184·4	1·8
193	186·7	186·4	186·2	185·9	185·6	1·8
194	187·8	187·6	187·3	187·1	186·8	1·8
195	188·9	188·7	188·4	188·2	187·9	1·8
196	190·0	189·8	189·5	189·3	189·0	1·8
197	191·2	190·9	190·7	190·4	190·2	1·8
198	192·3	192·0	191·8	191·5	191·3	1·8
199	193·4	193·1	192·9	192·6	192·4	1·8
200	194·5	194·2	194·0	193·7	193·5	1·8

TRUE PER CENT.

Ind. 6 to 25. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	Subt.
6	0·3	0·0	. .	. .	. .	0·5
7	1·2	1·0	0·7	0·5	0·2	0·5
8	2·2	2·0	1·7	1·5	1·2	0·5
9	3·2	2·9	2·7	2·4	2·1	0·5
10	4·1	3·8	3·6	3·3	3·0	0·5
11	5·0	4·7	4·5	4·2	3·9	0·5
12	5·9	5·6	5·4	5·1	4·8	0·5
13	6·7	6·4	6·2	5·9	5·6	0·6
14	7·6	7·3	7·1	6·8	6·5	0·6
15	8·4	8·1	7·9	7·6	7·3	0·6
16	9·3	9·0	8·7	8·4	8·1	0·6
17	10·2	9·9	9·6	9·3	9·0	0·6
18	11·0	10·7	10·5	10·2	9·9	0·6
19	11·9	11·6	11·3	11·0	10·7	0·6
20	12·8	12·5	12·2	11·9	11·6	0·6
21	13·7	13·4	13·1	12·8	12·5	0·6
22	14·5	14·2	13·9	13·6	13·3	0·6
23	15·4	15·1	14·7	14·4	14·1	0·6
24	16·2	15·9	15·5	15·2	14·9	0·6
25	17·0	16·7	16·3	16·0	15·7	0·6

TRUE PER CENT.

Ind. 26 to 50. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	Subt.
26	17·9	17·5	17·2	16·8	16·5	0·6
27	18·7	18·4	18·0	17·7	17·4	0·6
28	19·5	19·2	18·8	18·5	18·2	0·6
29	20·4	20·0	19·7	19·3	19·0	0·6
30	21·2	20·8	20·5	20·1	19·8	0·6
31	22·0	21·6	21·3	20·9	20·6	0·6
32	22·8	22·4	22·1	21·7	21·4	0·6
33	23·6	23·3	22·9	22·6	22·2	0·6
34	24·4	24·1	23·7	23·4	23·0	0·6
35	25·2	24·9	24·5	24·2	23·8	0·7
36	26·0	25·7	25·3	25·0	24·6	0·7
37	26·8	26·5	26·1	25·8	25·4	0·7
38	27·7	27·3	27·0	26·6	26·2	0·7
39	28·5	28·1	27·8	27·4	27·0	0·7
40	29·3	28·9	28·6	28·2	27·8	0·7
41	30·0	29·7	29·3	29·0	28·6	0·7
42	30·9	30·5	30·2	29·8	29·4	0·7
43	31·7	31·3	31·0	30·6	30·2	0·7
44	32·6	32·2	31·8	31·4	31·0	0·7
45	33·5	33·1	32·6	32·2	31·8	0·7
46	34·3	33·9	33·5	33·1	32·7	0·8
47	35·1	34·7	34·3	33·9	33·5	0·8
48	35·9	35·5	35·1	34·7	34·3	0·8
49	36·7	36·3	35·9	35·5	35·1	0·8
50	37·5	37·1	36·7	36·3	35·9	0·8

TRUE PER CENT.

Ind. 51 to 75. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	Subt.
51	38·2	37·8	37·5	37·1	36·7	0·8
52	39·0	38·6	38·3	37·9	37·5	0·8
53	39·8	39·4	39·0	38·6	38·2	0·8
54	40·6	40·2	39·8	39·4	39·0	0·9
55	41·4	41·0	40·6	40·2	39·8	0·9
56	42·2	41·8	41·3	40·9	40·5	0·9
57	43·0	42·6	42·1	41·7	41·3	0·9
58	43·9	43·4	43·0	42·5	42·1	0·9
59	44·8	44·3	43·9	43·4	42·9	0·9
60	45·8	45·3	44·7	44·2	43·7	0·9
61	46·8	46·3	45·7	45·2	44·7	0·9
62	47·8	47·3	46·7	46·2	45·7	1·0
63	48·8	48·3	47·7	47·2	46·7	1·0
64	49·8	49·3	48·8	48·3	47·8	1·0
65	50·8	50·3	49·9	49·4	48·9	1·0
66	51·8	51·4	50·9	50·5	50·0	1·0
67	52·8	52·4	51·9	51·5	51·0	1·0
68	53·8	53·4	52·9	52·5	52·0	1·0
69	54·8	54·4	53·9	53·5	53·0	1·0
70	55·8	55·4	54·9	54·5	54·0	1·0
71	56·8	56·4	55·9	55·5	55·0	1·1
72	57·8	57·4	56·9	56·5	56·0	1·1
73	58·8	58·4	57·9	57·5	57·0	1·1
74	59·9	59·5	59·0	58·6	58·1	1·1
75	60·9	60·5	60·0	59·6	59·1	1·1

TRUE PER CENT.

Ind. 76 to 100. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	
						Subt.
76	61·9	61·5	61·0	60·6	60·1	1·1
77	63·0	62·5	62·1	61·6	61·2	1·1
78	64·0	63·5	63·1	62·6	62·2	1·2
79	65·0	64·6	64·1	63·7	63·2	1·2
80	66·0	65·6	65·1	64·7	64·2	1·2
81	67·0	66·6	66·1	65·7	65·2	1·2
82	68·0	67·6	67·1	66·7	66·2	1·2
83	69·0	68·6	68·1	67·7	67·2	1·2
84	70·1	69·6	69·2	68·7	68·3	1·3
85	71·1	70·6	70·2	69·7	69·3	1·3
86	72·1	71·6	71·2	70·7	70·3	1·3
87	73·1	72·6	72·2	71·7	71·3	1·3
88	74·1	73·6	73·2	72·7	72·3	1·3
89	75·1	74·6	74·2	73·7	73·3	1·3
90	76·1	75·6	75·2	74·7	74·3	1·4
91	77·1	76·7	76·2	75·8	75·3	1·4
92	78·2	77·7	77·3	76·8	76·3	1·4
93	79·3	78·8	78·4	77·9	77·4	1·4
94	80·4	79·9	79·5	79·0	78·5	1·4
95	81·5	81·0	80·6	80·1	79·7	1·4
96	82·6	82·1	81·7	81·2	80·8	1·4
97	83·6	83·1	82·7	82·2	81·8	1·4
98	84·6	84·1	83·7	83·2	82·8	1·5
99	85·6	85·1	84·7	84·2	83·8	1·5
100	86·6	86·1	85·7	85·2	84·8	1·5

TRUE PER CENT.

Ind. 101 to 125. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	
						Subt.
101	87·6	87·1	86·7	86·2	85·8	1·5
102	88·7	88·2	87·8	87·3	86·9	1·5
103	89·7	89·3	88·8	88·4	87·9	1·5
104	90·8	90·4	89·9	89·5	89·0	1·5
105	91·9	91·4	91·0	90·5	90·1	1·5
106	93·0	92·5	92·1	91·6	91·2	1·5
107	94·0	93·6	93·1	92·7	92·3	1·6
108	95·1	94·6	94·2	93·7	93·3	1·6
109	96·1	95·6	95·2	94·7	94·3	1·6
110	97·2	96·7	96·3	95·8	95·4	1·6
111	98·2	97·7	97·3	96·8	96·4	1·6
112	99·3	98·8	98·4	97·9	97·5	1·6
113	100·3	99·8	99·4	98·9	98·5	1·6
114	101·4	100·9	100·5	100·0	99·6	1·6
115	102·4	102·0	101·5	101·1	100·7	1·6
116	103·4	103·0	102·5	102·1	101·7	1·6
117	104·4	104·0	103·6	103·2	102·8	1·6
118	105·5	105·1	104·6	104·2	103·8	1·7
119	106·5	106·1	105·6	105·2	104·8	1·7
120	107·5	107·1	106·7	106·3	105·9	1·7
121	108·5	108·1	107·7	107·3	106·9	1·7
122	109·5	109·1	108·7	108·3	107·9	1·7
123	110·6	110·2	109·7	109·3	108·9	1·7
124	111·7	111·2	110·8	110·3	109·9	1·7
125	112·7	112·3	111·8	111·4	111·0	1·7

TRUE PER CENT.

Ind. 126 to 150. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	
						Subt.
126	113·8	113·4	112·9	112·5	112·1	1·7
127	114·8	114·4	114·0	113·6	113·2	1·7
128	115·9	115·5	115·0	114·6	114·2	1·7
129	116·9	116·5	116·0	115·6	115·2	1·7
130	117·9	117·5	117·1	116·7	116·3	1·7
131	118·9	118·5	118·1	117·7	117·3	1·7
132	119·9	119·5	119·2	118·8	118·4	1·7
133	121·0	120·6	120·2	119·8	119·4	1·7
134	122·0	121·6	121·2	120·8	120·4	1·8
135	123·0	122·6	122·2	121·8	121·4	1·8
136	124·0	123·6	123·2	122·8	122·4	1·8
137	125·1	124·7	124·3	123·9	123·5	1·8
138	126·2	125·8	125·3	124·9	124·5	1·8
139	127·3	126·9	126·4	126·0	125·6	1·8
140	128·4	128·0	127·5	127·1	126·7	1·8
141	129·4	129·0	128·6	128·2	127·8	1·8
142	130·5	130·1	129·7	129·3	128·9	1·8
143	131·5	131·1	130·7	130·3	129·9	1·8
144	132·5	132·1	131·8	131·4	131·0	1·8
145	133·5	133·1	132·8	132·4	132·0	1·8
146	134·5	134·1	133·8	133·4	133·0	1·8
147	135·5	135·2	134·8	134·5	134·1	1·8
148	136·6	136·2	135·9	135·5	135·1	1·8
149	137·6	137·2	136·9	136·5	136·1	1·9
150	138·7	138·3	138·0	137·6	137·2	1·9

TRUE PER CENT.

Ind. 151 to 175. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. for vol.
	91°	92°	93°	94°	95°	Subt.
151	139·7	139·3	139·0	138·6	138·2	1·9
152	140·8	140·4	140·1	139·7	139·3	1·9
153	141·8	141·4	141·1	140·7	140·3	1·9
154	142·9	142·5	142·2	141·8	141·4	1·9
155	143·9	143·5	143·2	142·8	142·4	1·9
156	145·0	144·6	144·3	143·9	143·5	1·9
157	146·0	145·7	145·3	145·0	144·6	1·9
158	147·1	146·7	146·4	146·0	145·6	1·9
159	148·1	147·8	147·4	147·1	146·7	1·9
160	149·2	148·9	148·5	148·2	147·8	1·9
161	150·2	149·9	149·5	149·2	148·8	1·9
162	151·3	151·0	150·6	150·3	149·9	1·9
163	152·4	152·1	151·7	151·4	151·0	1·9
164	153·4	153·1	152·7	152·4	152·0	1·9
165	154·5	154·2	153·8	153·5	153·1	1·9
166	155·5	155·2	154·8	154·5	154·1	1·9
167	156·6	156·3	155·9	155·6	155·2	1·9
168	157·7	157·3	157·0	156·6	156·3	1·9
169	158·7	158·4	158·0	157·7	157·3	1·9
170	159·8	159·4	159·1	158·7	158·4	2·0
171	160·8	160·5	160·1	159·8	159·4	2·0
172	161·9	161·6	161·2	160·9	160·5	2·0
173	163·0	162·6	162·3	161·9	161·6	2·0
174	164·1	163·7	163·4	163·0	162·7	2·0
175	165·2	164·8	164·5	164·1	163·8	2·0

TRUE PER CENT.

Ind. 176 to 200. Temp. 91° to 95°.

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	
						Subt.
176	166·3	165·9	165·6	165·2	164·9	2·0
177	167·4	167·0	166·7	166·3	166·0	2·0
178	168·5	168·1	167·8	167·4	167·1	2·0
179	169·6	169·3	168·9	168·6	168·3	2·0
180	170·7	170·4	170·0	169·7	169·4	2·0
181	171·8	171·5	171·1	170·8	170·5	2·0
182	172·9	172·6	172·2	171·9	171·6	2·0
183	174·0	173·7	173·3	173·0	172·7	2·0
184	175·1	174·8	174·4	174·1	173·8	2·0
185	176·1	175·8	175·5	175·2	174·9	2·0
186	177·2	176·9	176·6	176·3	176·0	2·0
187	178·3	178·0	177·8	177·5	177·2	2·0
188	179·5	179·2	178·9	178·6	178·3	2·0
189	180·6	180·3	180·1	179·8	179·5	2·1
190	181·8	181·5	181·2	180·9	180·6	2·1
191	182·9	182·6	182·4	182·1	181·8	2·1
192	184·1	183·8	183·6	183·3	183·0	2·1
193	185·3	185·0	184·8	184·5	184·2	2·1
194	186·5	186·2	186·0	185·7	185·4	2·1
195	187·6	187·4	187·1	186·9	186·6	2·1
196	188·8	188·5	188·3	188·0	187·8	2·1
197	189·9	189·7	189·4	189·2	188·9	2·1
198	191·1	190·8	190·6	190·3	190·1	2·1
199	192·2	191·9	191·7	191·4	191·2	2·1
200	193·3	193·0	192·8	192·5	192·3	2·1

TRUE PER CENT.

Ind. 8 to 25. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	Subt.
8	0·9	0·6	0·3	0·0	. .	0·6
9	1·8	1·5	1·3	1·0	0·7	0·6
10	2·7	2·4	2·2	1·9	1·6	0·7
11	3·6	3·3	3·1	2·8	2·5	0·7
12	4·5	4·2	3·9	3·6	3·3	0·7
13	5·3	5·0	4·7	4·4	4·1	0·7
14	6·2	5·9	5·6	5·3	5·0	0·7
15	7·0	6·7	6·4	6·1	5·8	0·7
16	7·8	7·5	7·2	6·9	6·6	0·7
17	8·7	8·4	8·1	7·8	7·5	0·7
18	9·6	9·3	8·9	8·6	8·3	0·7
19	10·4	10·1	9·7	9·4	9·1	0 7
20	11·3	11·0	10·6	10·3	10·0	0·7
21	12·2	11·8	11·5	11·1	10·8	0·7
22	13·0	12·6	12 3	11·9	11·6	0·7
23	13·8	13·4	13·1	12·7	12·4	0·7
24	14·6	14·2	13·9	13·5	13·2	0·7
25	15·4	15·0	14·7	14·3	14·0	0·7

TRUE PER CENT.

Ind. 26 to 50. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	Subt.
26	16·2	15·8	15·5	15·1	14·8	0·7
27	17·0	16·7	16·3	16·0	15·6	0·7
28	17·8	17·5	17·1	16·8	16·4	0·7
29	18·6	18·3	17·9	17·6	17·2	0·7
30	19·4	19·1	18·7	18·4	18·0	0·7
31	20·2	19·9	19·5	19·2	18·8	0·7
32	21·0	20·6	20·3	19·9	19·5	0·7
33	21·8	21·4	21·1	20·7	20·3	0·7
34	22·6	22·2	21·9	21·5	21·1	0·8
35	23·4	23·0	22·7	22·3	21·9	0·8
36	24·2	23·8	23·5	23·1	22·7	0·8
37	25·0	24·6	24·3	23·9	23·5	0·8
38	25·8	25·4	25·1	24·7	24·3	0.8
39	26·6	26·2	25·8	25·4	25·0	0·8
40	27·4	27·0	26·6	26·2	25·8	0·8
41	28·2	27·8	27·4	27·0	26·6	0·8
42	29·0	28·6	28·2	27·8	27·4	0·8
43	29·8	29·4	29·0	28·6	28·2	0·8
44	30·6	30·2	29·7	29·3	28·9	0·8
45	31·4	31·0	30·5	30·1	29·7	0·9
46	32·3	31·9	31·4	31·0	30·6	0·9
47	33·1	32·7	32·2	31·8	31·4	0·9
48	33·9	33·5	33·0	32·6	32·2	0·9
49	34·7	34·3	33·8	33·4	33·0	0·9
50	35·5	35·1	34·6	34·2	33·8	0·9

TRUE PER CENT.

Ind. 51 to 75. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	
						Subt.
51	36·3	35·9	35·4	35·0	34·6	0·9
52	37·1	36·7	36·3	35·9	35·5	0·9
53	37·8	37·4	37·1	36·7	36·3	0·9
54	38·6	38·2	37·8	37·4	37·0	1·0
55	39·4	39·0	38·6	38·2	37·8	1·0
56	40·1	39·7	39·3	38·9	38·5	1·0
57	40·9	40·5	40·1	39·7	39·3	1·0
58	41·7	41·3	40·9	40·5	40·1	1·0
59	42·5	42·1	41·6	41·2	40·8	1·1
60	43·3	42·9	42·4	42·0	41·6	1·1
61	44·2	43·7	43·3	42·8	42·3	1·1
62	45·2	44·7	44·1	43·6	43·1	1·1
63	46·2	45·7	45·1	44·6	44·1	1·1
64	47·3	46·7	46·2	45·6	45·1	1·1
65	48·4	47·8	47·3	46·7	46·2	1·1
66	49·5	48·9	48·4	47·8	47·3	1·1
67	50·5	50·0	49·4	48·9	48·4	1·1
68	51·5	51·0	50·6	50·1	49·6	1·1
69	52·5	52·0	51·6	51·1	50·6	1·2
70	53·5	53·0	52·6	52·1	51·6	1·2
71	54·5	54·1	53·6	53·2	52·7	1·2
72	55·5	55·1	54·6	54·2	53·7	1·2
73	56·5	56·1	55·6	55·2	54·7	1·2
74	57·6	57·1	56·7	56·2	55·7	1·2
75	58·6	58·1	57·7	57·2	56·7	1·3

TRUE PER CENT.

Ind. 76 to 100. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	
						Subt.
76	59·6	59·1	58·7	58·2	57·7	1·3
77	60·7	60·2	59·8	59·3	58·8	1·3
78	61·7	61·2	60·8	60·3	59·8	1·3
79	62·7	62·3	61·8	61·4	60·9	1·3
80	63·7	63·3	62·8	62·4	61·9	1·3
81	64·7	64·3	63·8	63·4	62·9	1·4
82	65·8	65·3	64·9	64·4	64·0	1·4
83	66·8	66·3	65·9	65·4	65·0	1·4
84	67·8	67·4	66·9	66·5	66·0	1·4
85	68·9	68·4	68·0	67·5	67·1	1·4
86	69·9	69·4	69·0	68·5	68·1	1·5
87	70·9	70·4	70·0	69·5	69·1	1·5
88	71·9	71·4	71·0	70·5	70·1	1·5
89	72·9	72·4	72·0	71·5	71·1	1·5
90	73·9	73·4	73·0	72·5	72·1	1·5
91	74·9	74·4	74·0	73·5	73·1	1·6
92	75·9	75·4	75·0	74·5	74·1	1·6
93	76·9	76·5	76·0	75·6	75·1	1·6
94	78·0	77·5	77·1	76·6	76·1	1·6
95	79·2	78·7	78·2	77·7	77·2	1·6
96	80·3	79·8	79·3	78·8	78·3	1·6
97	81·3	80·9	80·4	80·0	79·5	1·6
98	82·4	81·9	81·5	81·0	80·6	1·7
99	83·4	83·0	82·5	82·1	81·7	1·7
100	84·4	84·0	83·5	83·1	82·7	1·7

TRUE PER CENT.

Ind. 101 to 125. **Temp. 96° to 100°.**

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	
						Subt.
101	85·4	85·0	84·5	84·1	83·7	1·7
102	86·5	86·0	85·6	85·1	84·7	1·7
103	87·5	87·0	86·6	86·1	85·7	1·7
104	88·5	88·1	87·6	87·2	86·7	1·7
105	89·6	89·2	88·7	88·3	87·8	1·8
106	90·7	90·3	89·8	89·4	88·9	1·8
107	91·8	91·4	90·9	90·5	90·0	1·8
108	92·9	92·4	92·0	91·5	91·1	1·8
109	93·9	93·5	93·0	92·6	92·2	1·8
110	95·0	94·5	94·1	93·6	93·2	1·8
111	96·0	95·6	95·1	94·7	94·3	1·8
112	97·1	96·6	96·2	95·7	95·3	1·8
113	98·1	97·7	97·2	96·8	96·4	1·8
114	99·2	98·8	98·3	97·9	97·5	1·8
115	100·3	99·8	99·4	98·9	98·5	1·9
116	101·3	100·9	100·4	100·0	99·6	1·9
117	102·4	102·0	101·5	101·1	100·7	1·9
118	103·4	103·0	102·5	102·1	101·7	1·9
119	104·4	104·0	103·6	103·2	102·8	1·9
120	105·5	105·1	104·6	104·2	103·8	1·9
121	106·5	106·1	105·6	105·2	104·8	1·9
122	107·5	107·1	106·7	106·3	105·9	1·9
123	108·5	108·1	107·7	107·3	106·9	1·9
124	109·5	109·1	108·7	108·3	107·9	1·9
125	110·6	110·2	109·7	109·3	108·9	2·0

TRUE PER CENT.

Ind. 126 to 150. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	Subt.
126	111·7	111·2	110·8	110·3	109·9	2·0
127	112·8	112·3	111·9	111·4	111·0	2·0
128	113·8	113·3	112·9	112·4	112·0	2·0
129	114·8	114·4	113·9	113·5	113·1	2·0
130	115·9	115·5	115·0	114·6	114·2	2·0
131	116·9	116·5	116·1	115·7	115·3	2·0
132	118·0	117·6	117·2	116·8	116·4	2·0
133	119·0	118·6	118·2	117·8	117·4	2·0
134	120·0	119·6	119·2	118·8	118·4	2·0
135	121·0	120·6	120·2	119·8	119·4	2·0
136	122·0	121·6	121·2	120·8	120·4	2·0
137	123·1	122·7	122·3	121·9	121·5	2·0
138	124·1	123·7	123·3	122·9	122·5	2·1
139	125·2	124·8	124·3	123·9	123·5	2·1
140	126·3	125·9	125·4	125·0	124·6	2·1
141	127·4	127·0	126·5	126·1	125·7	2·1
142	128·5	128·1	127·6	127·2	126·8	2·1
143	129·5	129·1	128·7	128·3	127·9	2·1
144	130·6	130·2	129·8	129·4	129·0	2·1
145	131·6	131·2	130·9	130·5	130·1	2·1
146	132·6	132·2	131·9	131·5	131·1	2·1
147	133·7	133·3	132·9	132·5	132·1	2·1
148	134·7	134·3	134·0	133·6	133·2	2·1
149	135·7	135·3	135·0	134·6	134·2	2·1
150	136·8	136·4	136·0	135·6	135·2	2·1

TRUE PER CENT.

Ind. 151 to 175. Temp. 96° to 100°.

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	
						Subt.
151	137·8	137·4	137·1	136·7	136·3	2·1
152	138·9	138·5	138·1	137·7	137·3	2·1
153	139·9	139·5	139·1	138·7	138·3	2·2
154	141·0	140·6	140·2	139·8	139·4	2·2
155	142·0	141·6	141·3	140·9	140·5	2·2
156	143·1	142·7	142·4	142·0	141·6	2·2
157	144·2	143·8	143·5	143·1	142·7	2·2
158	145·2	144·8	144·5	144·1	143·7	2·2
159	146·3	145·9	145·6	145·2	144·8	2·2
160	147·4	147·0	146·7	146·3	145·9	2·2
161	148·4	148·1	147·7	147·4	147·0	2·2
162	149·5	149·2	148·8	148·5	148·1	2·2
163	150·6	150·2	149·9	149·5	149·1	2·2
164	151·6	151·3	150·9	150·6	150·2	2·2
165	152·7	152·4	152·0	151·7	151·3	2·2
166	153·7	153·4	153·0	152·7	152·3	2·2
167	154·8	154·5	154·1	153·8	153·4	2·2
168	155·9	155·6	155·2	154·9	154·5	2·2
169	157·0	156·6	156·3	155·9	155·6	2·2
170	158·0	157·7	157·3	157·0	156·6	2·2
171	159·1	158·7	158·4	158·0	157·7	2·2
172	160·2	159·8	159·5	159·1	158·8	2·2
173	161·3	160·9	160·6	160·2	159·9	2·3
174	162·4	162·0	161·7	161·3	161·0	2·3
175	163·5	163·1	162·8	162·4	162·1	2·3

TRUE PER CENT.

Ind. 176 to 200. Temp. 96° to 100°

Indication.	TEMPERATURES.					Corr. to vol.
	96°	97°	98°	99°	100°	Subt.
176	164·6	164·2	163·9	163·5	163·2	2·3
177	165·7	165·4	165·0	164·7	164·4	2·3
178	166·8	166·5	166·1	165·8	165·5	2·3
179	168·0	167·6	167·3	166·9	166·6	2·3
180	169·1	168·7	168·4	168·0	167·7	2·3
181	170·2	169·9	169·5	169·2	168·9	2·3
182	171·3	171·0	170·6	170·3	170·0	2·3
183	172·4	172·1	171·7	171·4	171·1	2·3
184	173·5	173·2	172·8	172·5	172·2	2·3
185	174·6	174·3	173·9	173·6	173·3	2·3
186	175·7	175·4	175·0	174·7	174·4	2·3
187	176·9	176·6	176·2	175·9	175·6	2·3
188	178·0	177·7	177·4	177·1	176·8	2·3
189	179·2	178·9	178·6	178·3	178·0	2·3
190	180·3	180·0	179·8	179·5	179·2	2·3
191	181·5	181·2	181·0	180·7	180·4	2·4
192	182·7	182·4	182·2	181·9	181·6	2·4
193	183·9	183·6	183·4	183·1	182·8	2·4
194	185·1	184·8	184·6	184·3	184·0	2·4
195	186·3	186·0	185·8	185·5	185·2	2·4
196	187·5	187·2	187·0	186·7	186·4	2·4
197	188·6	188·4	188·1	187·9	187·6	2·4
198	189·8	189·6	189·3	189·1	188·8	2·4
199	190·9	190·7	190·4	190·2	189·9	2·4
200	192·1	191·8	191·6	191·3	191·1	2·4

TRUE PER CENT.

Ind. 201 to 205. Temp. 66° to 90°.

Indication.	TEMPERATURES.					Corr. to vol.
	66°	67°	68°	69°	70°	Subt.
201	199·8	199·6	199·4	199·2	199·0	0·6
	71°	72°	73°	74°	75°	
201	198·8	198·6	198·4	198·2	198·0	0·9
202	199·9	199·7	199·4	199·2	199·0	0·9
	76°	77°	78°	79°	80°	
201	197·8	197·6	197·3	197·1	196·9	1·2
202	198·8	198·6	198·3	198·1	197·9	1·2
203	199·9	199·7	199·4	199·2	199·0	1·2
	81°	82°	83°	84°	85°	
201	196·7	196·4	196·2	195·9	195·7	1·5
202	197·7	197·5	197·2	197·0	196·8	1·5
203	198·8	198·6	198·3	198·1	197·9	1·5
204	199·9	199·7	199·4	199·2	199·0	1·5
	86°	87°	88°	89°	90°	
201	195·5	195·3	195·0	194·8	194·6	1·8
202	196·6	196·4	196·1	195·9	195·7	1·8
203	197·7	197·5	197·2	197·0	196·8	1·8
204	198·8	198·6	198·3	198·1	197·9	1·8
205	199·9	199·7	199·4	199·2	199·0	1·8

TRUE PER CENT.

Ind. 201 to 207. **Temp. 91° to 100°.**

Indication.	TEMPERATURES.					Corr. to vol.
	91°	92°	93°	94°	95°	Subt.
201	194·4	194·2	193·9	193·7	193·5	2·1
202	195·5	195·3	195·0	194·8	194·6	2·1
203	196·6	196·4	196·1	195·9	195·7	2·1
204	197·7	197·5	197·2	197·0	196·8	2·1
205	198·8	198·6	198·3	198·1	197·9	2·1
206	200·0	199·8	199·5	199·3	199·1	2·1
	96°	97°	98°	99°	100°	
201	193·2	193·0	192·7	192·5	192·2	2·4
202	194·4	194·1	193·9	193·6	193·4	2·4
203	195·5	195·2	195·0	194·7	194·5	2·4
204	196·6	196·3	196·1	195·8	195·6	2·5
205	197·7	197·5	197·2	197·0	196·8	2·5
206	198·9	198·7	198·4	198·2	198·0	2·5
207	200·0	199·8	199·5	199·3	199·1	2·5

TABLE No. 6,

For finding the number of gallons at 60° Fahr. from the weight and strength of spirituous liquor.

This is a table for gauging by means of the weight of the liquor and the true per cent. The following example fully illustrates its use:

Example.—A cask of spirit of 141 per cent. strength (or 41 over proof) weighed 913 pounds net. We find,

900	pounds	equal to - - - -	121.54	gallons.
10	"	" - - - -	1.35	"
3	"	" - - - -	.41	"
		Or contents, - - - -	123.30	"

that is, 913 pounds of spirit of strength 141 is equivalent to 123.3 gallons at 60° Fahr.

The equivalent gallons for 10 pounds are found from the column 100 pounds by moving the decimal point one place to the left; those for 3 pounds from the column 300 pounds by moving the decimal point two places to the left.

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	100	200	300	400	500
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
2	12·02	24·04	36·06	48·08	60·10
4	·04	·07	·11	·15	·18
6	·05	·11	·16	·22	·27
8	·07	·14	·21	·29	·36
10	·09	·18	·27	·35	·44
12	12·10	24·21	36·31	48·42	60·52
14	·12	·24	·36	·48	·60
16	·13	·27	·40	·54	·67
18	·15	·30	·45	·60	·75
20	·17	·33	·50	·66	·83
22	12·18	24·36	36·54	48·72	60·90
24	·19	·39	·58	·77	·96
26	·21	·41	·62	·83	61·03
28	·22	·44	·66	·88	·10
30	·23	·47	·70	·93	·17
32	12·25	24·49	36·74	48·99	61·23
34	·26	·52	·78	49·04	·30
36	·27	·54	·82	·09	·36
38	·29	·57	·86	·14	·43
40	·30	·60	·89	·19	·49
42	12·31	24·62	36·93	49·24	61·55
44	·32	·65	·97	·29	·62
46	·34	·67	37·01	·35	·68
48	·35	·70	·05	·40	·75
50	·36	·73	·09	·45	·81

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
2	72·12	84·14	96·16	108·18	120·20
4	·22	·26	·30	·33	·37
6	·32	·38	·43	·49	·54
8	·43	·50	·57	·64	·71
10	·53	·62	·71	·80	·89
12	72·63	84·73	96·84	108·94	121·04
14	·72	·84	·96	109·08	·20
16	·81	·94	97·08	·21	·35
18	·90	85·05	·20	·35	·50
20	·99	·16	·32	·49	·65
22	73·07	85·25	97·43	109·61	121·79
24	·16	·35	·54	·74	·93
26	·24	·45	·65	·86	122·07
28	·32	·54	·76	·98	·20
30	·40	·63	·87	110·10	·34
32	73·48	85·72	97·97	110·22	122·46
34	·56	·82	98·07	·33	·59
36	·63	·91	·18	·45	·72
38	·71	86·00	·28	·57	·85
40	·79	·09	·38	·68	·98
42	73·86	86·18	98·49	110·80	123·11
44	·94	·27	·59	·91	·24
46	74·02	·36	·70	111·03	·37
48	·10	·45	·80	·15	·50
50	·18	·54	·90	·27	·63

GALLONS,

By weight and strength of spirit.

Per cent.	POUNDS.				
	100	**200**	**300**	**400**	**500**
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
51	12.37	24.74	37.11	49.48	61.85
52	.38	.75	.13	.51	.88
53	.38	.77	.15	.53	.92
54	.39	.78	.17	.56	.95
55	.40	.79	.19	.59	.98
56	12.40	24.81	37.21	49.61	62.02
57	.41	.82	.23	.64	.05
58	.42	.84	.25	.67	.09
59	.43	.85	.28	.70	.13
60	.43	.87	.30	.73	.16
61	12.44	24.88	37.32	49.76	62.20
62	.45	.90	.34	.79	.24
63	.46	.91	.37	.82	.28
64	.46	.93	.39	.85	.32
65	.47	.94	.42	.89	.36
66	12.48	24.96	37.44	49.92	62.40
67	.49	.98	.46	.95	.44
68	.50	.99	.49	.99	.48
69	.51	25.01	.52	50.02	.53
70	.51	.03	.54	.06	.57
71	12.52	25.05	37.57	50.09	62.61
72	.53	.06	.60	.13	.66
73	.54	.08	.62	.16	.71
74	.55	.10	.65	.20	.75
75	.56	.12	.68	.24	.80

GALLONS,

By weight and strength of spirit.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
51	74.22	86.59	98.96	111.33	123.70
52	.26	.64	99.01	.39	.76
53	.30	.68	.07	.45	.83
54	.34	.73	.12	.51	.90
55	.38	.78	.18	.57	.97
56	74.42	86.83	99.23	111.63	124.04
57	.47	.88	.29	.70	.11
58	.51	.93	.35	.76	.18
59	.55	.98	.40	.83	.26
60	.60	87.03	.46	.90	.33
61	74.64	87.08	99.52	111.96	124.40
62	.69	.13	.58	112.03	.48
63	.73	.19	.65	.10	.56
64	.78	.25	.71	.17	.64
65	.83	.30	.77	.25	.72
66	74.88	87.36	99.84	112.32	124.80
67	.93	.42	.90	.39	.88
68	.98	.48	.97	.47	.97
69	75.03	.54	100.04	.55	125.05
70	.08	.60	.11	.63	.14
71	75.14	87.66	100.18	112.71	125.23
72	.19	.72	.25	.79	.32
73	.25	.79	.33	.87	.41
74	.30	.85	.40	.96	.51
75	.36	.92	.48	113.04	.60

GALLONS,

By weight and strength of spirit.

Per cent.	POUNDS.				
	100	**200**	**300**	**400**	**500**
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
76	12.57	25.14	37.71	50.28	62.85
77	.58	.16	.74	.32	.90
78	.59	.18	.77	.36	.95
79	.60	.20	.80	.40	63.00
80	.61	.22	.83	.44	.05
81	12.62	25.24	37.86	50.48	63.10
82	.63	.26	.89	.52	.15
83	.64	.28	.92	.56	.21
84	.65	.30	.96	.61	.26
85	.66	.33	.99	.65	.32
86	12.67	25.35	38.02	50.70	63.37
87	.69	.37	.06	.74	.43
88	.70	.39	.09	.79	.49
89	.71	.42	.13	.83	.54
90	.72	.44	.16	.88	.60
91	12.73	25.46	38.20	50.93	63.66
92	.74	.49	.23	.98	.72
93	.76	.51	.27	51.03	.78
94	.77	.54	.31	.07	.84
95	.78	.56	.34	.13	.91
96	12.79	25.59	38.38	51.18	63.97
97	.81	.61	.42	.23	64.03
98	.82	.64	.46	.28	.10
99	.83	.67	.50	.33	.16
100	.85	.69	.54	.38	.23

GALLONS,

By weight and strength of spirit.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Gallons.	*Gallons.*	*Gallons.*	*Gallons.*	*Gallons.*
76	75.42	87.99	100.56	113.12	125.69
77	.48	88.06	.63	.21	.79
78	.54	.12	.71	.30	.89
79	.59	.19	.79	.39	.99
80	.65	.26	.87	.48	126.09
81	75.72	88.34	100.96	113.58	126.20
82	.78	.41	101.04	.67	.30
83	.85	.49	.13	.77	.41
84	.91	.56	.22	.87	.52
85	.98	.64	.31	.97	.63
86	76.05	88.72	101.40	114.07	126.74
87	.11	.80	.49	.17	.86
88	.18	.88	.58	.27	.97
89	.25	.96	.67	.38	127.09
90	.32	89.04	.76	.48	.20
91	76.39	89.13	101.86	114.59	127.32
92	.46	.21	.95	.70	.44
93	.54	.29	102.05	.81	.56
94	.61	.38	.15	.92	.69
95	.69	.47	.25	115.03	.81
96	76.76	89.56	102.35	115.15	127.94
97	.84	.65	.46	.26	128.07
98	.92	.74	.56	.38	.20
99	77.00	.83	.66	.50	.33
100	.08	.92	.77	.61	128.46

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	100	200	300	400	500
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
101	12·86	25·72	38·58	51·44	64·30
102	·87	·74	·61	·49	·36
103	·89	·77	·66	·55	·43
104	·90	·80	·70	·60	·50
105	·91	·83	·74	·66	·57
106	12·93	25·86	38·79	51·71	64·64
107	·94	·89	·83	·77	·71
108	·96	·91	·87	·83	·79
109	·97	·94	·91	89	·86
110	·99	·97	·96	94	·93
111	13·00	26·00	39·00	52·00	65·01
112	·02	·03	·05	·06	·08
113	·03	·06	·09	·12	·15
114	·05	·09	·14	·18	·23
115	·06	·12	·18	·25	·31
116	13·08	26·15	39·23	52·31	65·38
117	·09	·18	·28	·37	·46
118	·11	·22	·32	·43	·54
119	·12	·25	·37	·50	·62
120	·14	·28	·42	·56	·70
121	13·16	26·31	39·47	52·62	65·78
122	·17	·34	·52	·69	·86
123	·19	·38	·57	·75	·94
124	·20	·41	·61	·82	66·02
125	·22	·44	·66	·89	·11

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
101	77·15	90·01	102·87	115·73	128·59
102	·23	·11	·98	·85	·72
103	·32	·20	103·09	·98	·86
104	·40	·30	·20	116·10	129·00
105	·49	·40	·32	·23	·14
106	77·57	90·50	103·43	116·36	129·29
107	·66	·60	·54	·49	·43
108	·74	·70	·66	·61	·57
109	·83	·80	·77	·74	·72
110	·92	·90	·89	·88	·86
111	78·01	91·01	104·01	117·01	130·01
112	·09	·11	·13	·14	·16
113	·19	·22	·25	·28	·31
114	·28	·32	·37	·41	·46
115	·37	·43	·49	·55	·61
116	78·46	91·54	104·61	117·69	130·77
117	·55	·65	·74	·83	·92
118	·65	·76	·86	·97	131·08
119	·74	·87	·99	118·11	·24
120	·84	·98	105·12	·26	·40
121	78·94	92·09	105·25	118·40	131·56
122	79·03	·21	·38	·55	·72
123	·13	·32	·51	·70	·88
124	·23	·43	·64	·84	132·05
125	·33	·55	·77	·99	·21

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	100	200	300	400	500
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
126	13·24	26·48	39·71	52·95	66·19
127	·25	·51	·76	53·02	·27
128	·27	·54	·81	·09	·36
129	·29	·58	·86	·15	·44
130	·31	·61	·92	·22	·53
131	13·32	26·65	39·97	53·29	66·61
132	·34	·68	40·02	·36	·70
133	·36	·72	·07	·43	·79
134	·38	·75	·13	·50	·88
135	·39	·79	·18	·57	·97
136	13·41	26·82	40·24	53·65	67·06
137	·43	·86	·29	·72	·15
138	·45	·90	·34	·79	·24
139	·47	·93	·40	·87	·33
140	·49	·97	·46	·94	·43
141	13·50	27·01	40·51	54·02	67·52
142	·52	·05	·57	·10	·62
143	·54	·09	·63	·17	·72
144	·56	·12	·69	·25	·81
145	·58	·16	·75	·33	·91
146	13·60	27·20	40·80	54·41	68·01
147	·62	·24	·86	·48	·11
148	·64	·28	·92	·56	·21
149	·66	·32	·98	·65	·31
150	·68	·36	41·04	·73	·41

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
126	79·43	92·66	105·90	119·14	132·38
127	·53	·78	106·04	·29	·55
128	·63	·90	·17	·44	·71
129	·73	93·02	·31	·59	·88
130	·83	·14	·44	·75	133·05
131	79·94	93·26	106·58	119·90	133·23
132	80·04	·38	·72	120·06	·40
133	·15	·50	·86	·22	·58
134	·25	·63	107·00	·38	·76
135	·36	·75	·15	·54	·94
136	80·47	93·88	107·29	120·71	134·12
137	·58	94·01	·44	·87	·30
138	·69	·14	·58	121·03	·48
139	·80	·27	·73	·20	·67
140	·91	·40	·89	·37	.86
141	81·03	94·53	108·04	121·54	135·05
142	·14	·67	·19	·71	·24
143	·26	·80	·34	·89	·43
144	·37	·94	·50	122·06	·62
145	·49	95·07	·65	·24	·82
146	81·61	95·21	108·81	122·41	136·01
147	·73	·35	·97	·59	·21
148	·85	·49	109·13	·77	·41
149	·97	·63	·29	·95	·61
150	82·09	·77	·45	123·13	·82

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	100	200	300	400	500
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
151	13·70	27·40	41·11	54·81	68·51
152	·72	·45	·17	·89	·61
153	·74	·49	·23	·97	·72
154	·76	·53	·29	55·06	·82
155	·79	·57	·36	·14	·93
156	13·81	27·61	41·42	55·23	69·03
157	·83	·66	·49	·31	·14
158	·85	·70	·55	·40	·25
159	·87	·75	·62	·49	·36
160	·89	·79	·68	·58	·47
161	13·92	27·83	41·75	55·67	69·59
162	·94	·88	·82	·76	·70
163	·96	·93	·89	·85	·81
164	·99	·97	·96	·94	·93
165	14·01	28·02	42·03	56·04	70·05
166	14·03	28·07	42·10	56·13	70·16
167	·06	·11	·17	·23	·28
168	·08	·16	·24	·32	·40
169	·10	·21	·31	·42	·52
170	·13	·26	·39	·52	·65
171	14·15	28·31	42·46	56·61	70·77
172	·18	·36	·53	·71	·89
173	·20	·41	·61	·82	71·02
174	·23	·46	·69	·92	·15
175	·26	51	·77	57·03	·28

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
151	82·21	95·91	109·62	123·32	137·02
152	·34	96·06	·78	·50	·23
153	·46	·20	·95	·69	·44
154	·59	·35	110·12	·88	·65
155	·71	·50	·29	124·07	·86
156	82·84	96·65	110·46	124·26	138·07
157	·97	·80	·63	·46	·29
158	83·10	·95	80	·66	·51
159	·24	97·11	98	·85	·73
160	·37	·26	111·16	125·05	·95
161	83·50	97·42	111·34	125·26	139·17
162	·64	·58	·52	·46	·40
163	·78	·74	·70	·67	·63
164	·92	·90	·89	·87	·86
165	84·06	98·06	112·07	126·08	140·09
166	84·20	98·23	112·26	126·29	140·33
167	·34	·40	·45	·51	·56
168	·48	·56	·64	·72	·80
169	·63	·73	·84	·94	141·04
170	·78	·90	113·03	127·16	·29
171	84·92	99·08	113·23	127·38	141·54
172	85·07	·25	·43	·60	·78
173	·22	·43	·63	·84	142·04
174	·38	·61	·84	128·07	·30
175	·54	·80	114·06	·31	·57

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	100	200	300	400	500
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
176	14·28	28·57	42·85	57·14	71·42
177	·31	·62	·93	·24	·55
178	·34	·68	43·01	·35	·69
179	·37	·73	·10	·46	·83
180	·39	·79	·18	·58	·97
181	14·42	28·85	43·27	57·69	72·12
182	·45	·91	·36	·81	·27
183	·48	·97	·45	·93	·41
184	·51	29·03	·54	58·05	·56
185	·54	·09	·63	·18	·72
186	14·58	29·15	43·73	58·30	72·88
187	·61	·22	·82	·43	73·04
188	·64	28	·92	·56	·20
189	·68	·35	44·03	·70	·38
190	·71	·42	·13	·84	·55
191	14·75	29·49	44·24	58·99	73·73
192	·78	·57	·35	59·13	·92
193	·82	·64	·46	·29	74·11
194	·86	·72	·58	·44	·30
195	·90	·80	·69	·59	·49
196	14·94	29·87	44·81	59·75	74·69
197	·98	·96	·93	·91	·89
198	15·02	30·04	45·06	60·08	75·09
199	·06	·12	·19	·25	·31
200	·11	·21	·32	·42	·53

GALLONS

BY WEIGHT AND STRENGTH OF SPIRIT.

Per cent.	POUNDS.				
	600	700	800	900	1000
	Galls.	*Galls.*	*Galls.*	*Galls.*	*Galls.*
176	85·70	99·99	114·27	128·55	142·84
177	·86	100·17	·49	·80	143·11
178	86·03	·36	·70	129·04	·38
179	·20	·56	·93	·29	·66
180	·37	·76	115·16	·55	·94
181	86·54	100·97	115·39	129·81	144·24
182	·72	101·17	·63	130·08	·53
183	·90	·38	·86	·35	·83
184	87·08	·59	116·10	·61	145·13
185	·26	·81	·35	·90	·44
186	87·45	102·03	116·61	131·18	145·76
187	·65	·26	·87	·47	146·08
188	·85	·49	117·13	·77	·41
189	88·05	·73	·40	132·08	·75
190	·26	·97	·68	·39	147·10
191	88·48	103·23	117·97	132·72	147·47
192	·70	·48	118·27	133·05	·84
193	·93	·75	·57	·39	148·21
194	89·16	104·02	·87	·73	·59
195	·39	·29	119·18	134·08	·98
196	89·62	104·56	119·50	134·43	149·37
197	·87	·84	·82	·80	·78
198	90·11	105·13	120·15	135·17	150·19
199	·37	·43	·49	·56	·62
200	·64	·74	·85	·95	151·06

TABLE No. 7,

Giving the respective volumes of absolute alcohol and water contained in 100 volumes of spirits of different strength, and also the specific gravities of the mixtures, referred, for convenience, to the density of water at 60° Fahr., as unity.

EXPLANATION OF TABLE No. 7,

AND DIRECTIONS FOR ITS USE.

This table will be found especially useful in reducing the strength of liquors by a definite amount.

To do this, divide the alcohol in the given strength by the alcohol in the required strength, multiply the quotient by the water in the required strength, and subtract the water in the given strength from the product. The remainder is the number of gallons of water to be added to 100 gallons of liquor of the given strength to produce a liquor of the required strength.

Example.—It is required to reduce liquor of 141 per cent. to proof.

We find on page 566, 141 per cent. contains—

70.5 parts alcohol, and 32.86 parts water.

Page 564, 100 per cent. contains—

50.0 parts alcohol, and 53.71 parts water.

Alcohol in 141 per cent., - - - - -	70.50
Divide by alcohol in 100 per cent. =50.00, - - - - - - - - - - -	1.41
Multiply by water in 100 per cent. =53.71, 50 - - - - - - - - - -	70.50
3 - - - - - - - - - -	4.23
.7 - - - - - - - - - -	.99
.01 - - - - - - - - - -	.01
	75.73
Subtract water in 141 per cent. =	32.86
Gallons of water to add to 100 gallons of 141 per cent. - - - - -	42.87

Or, to 100 gallons of 141 per cent. add 42.9 gallons of water, and the mixture will be proof-spirit.

This rule is generally applicable for reducing to any per cent.; but when it is required to reduce to 100 per cent., it is sufficient to multiply the given per cent. by 53.71, and deduct the water in the given strength. Thus, in the above example,

$$1.41 \times 53.71 - 32.86 = 75.73 - 32.86 = 42.87.$$

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
1	0·50	99·53	·99929
2	1·00	99·06	·99858
3	1·50	98·59	·99787
4	2·00	98·13	·99716
5	2·50	97·66	·99645
6	3·00	97·19	·99574
7	3·50	96·72	·99503
8	4·00	96·25	·99431
9	4·50	95·78	·99360
10	5·00	95·32	·99289
11	5·50	94·85	·99224
12	6·00	94·39	·99160
13	6·50	93·93	·99098
14	7·00	93·48	·99036
15	7·50	93·02	·98974
16	8·00	92·56	·98911
17	8·50	92·10	·98849
18	9·00	91·64	·98787
19	9·50	91·18	·98725
20	10·00	90·72	·98663
21	10·50	90·26	·98608
22	11·00	89·81	·98552
23	11·50	89·36	·98497
24	12·00	88·91	·98441
25	12·50	88·45	·98386

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
26	13·00	88·00	·98330
27	13·50	87·55	·98275
28	14·00	87·10	·98220
29	14·50	86·65	·98167
30	15·00	86·20	·98114
31	15·50	85·75	·98063
32	16·00	85·30	·98011
33	16·50	84·85	·97959
34	17·00	84·40	·97907
35	17·50	83·95	·97856
36	18·00	83·50	·97804
37	18·50	83·05	·97753
38	19·00	82·60	·97702
39	19·50	82·16	·97651
40	20·00	81·71	·97600
41	20·50	81·26	·97549
42	21·00	80·81	·97498
43	21·50	80·36	·97447
44	22·00	79·91	·97396
45	22·50	79·47	·97344
46	23·00	79·02	·97292
47	23·50	78·57	·97241
48	24·00	78·12	·97190
49	24·50	77·67	·97139
50	25·00	77·22	·97087

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
51	25·50	76·77	·97034
52	26·00	76·32	·96981
53	26·50	75·87	·96928
54	27·00	75·42	·96874
55	27·50	74·97	·96821
56	28·00	74·52	·96767
57	28·50	74·06	·96711
58	29·00	73·61	·96655
59	29·50	73·16	·96598
60	30·00	72·70	·96541
61	30·50	72·25	·96484
62	31·00	71·79	·96426
63	31·50	71·33	·96364
64	32·00	70·87	·96302
65	32·50	70·42	·96240
66	33·00	69·96	·96178
67	33·50	69·49	·96114
68	34·00	69·03	·96049
69	34·50	68·57	·95982
70	35·00	68·10	·95915
71	35·50	67·64	·95847
72	36·00	67·17	·95779
73	36·50	66·70	·95707
74	37·00	66·23	·95635
75	37·50	65·77	·95564

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
76	38·00	65·30	·95492
77	38·50	64·82	·95417
78	39·00	64·35	·95342
79	39·50	63·88	·95267
80	40·00	63·41	·95192
81	40·50	62·93	·95112
82	41·00	62·45	·95031
83	41·50	61·97	·94950
84	42·00	61·50	·94869
85	42·50	61·01	·94785
86	43·00	60·53	·94701
87	43·50	60·05	·94617
88	44·00	59·57	·94532
89	44·50	59·08	·94446
90	45·00	58·60	·94359
91	45·50	58·12	·94271
92	46·00	57·63	·94183
93	46·50	57·14	·94093
94	47·00	56·66	·94003
95	47·50	56·16	·93909
96	48·00	55·67	·93815
97	48·50	55·18	·93721
98	49·00	54·69	·93627
99	49·50	54·20	·93532
100	50·00	53·71	·93437

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
101	50·50	53·21	·93341
102	51·00	52·72	·93245
103	51·50	52·22	·93144
104	52·00	51·72	·93043
105	52·50	51·22	·92941
106	53·00	50·73	·92839
107	53·50	50·23	·92737
108	54·00	49·73	·92635
109	54·50	49·22	·92531
110	55·00	48·72	·92427
111	55·50	48·22	·92322
112	56·00	47·72	·92217
113	56·50	47·22	·92111
114	57·00	46·71	·92004
115	57·50	46·21	·91896
116	58·00	45·70	·91788
117	58·50	45·19	·91679
118	59·00	44·69	·91569
119	59·50	44·18	·91458
120	60·00	43·67	·91346
121	60·50	43·16	·91234
122	61·00	42·65	·91122
123	61·50	42·14	·91010
124	62·00	41·63	·90897
125	62·50	41·12	·90784

RESPECTIVE VOLUMES
OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
126	63·00	40·61	·90671
127	63·50	40·10	·90556
128	64·00	39·59	·90441
129	64·50	39·07	·90326
130	65·00	38·56	·90211
131	65·50	38·05	·90093
132	66·00	37·53	·89975
133	66·50	37·01	·89856
134	67·00	36·50	·89737
135	67·50	35·98	·89616
136	68·00	35·46	·89495
137	68·50	34·94	·89375
138	69·00	34·42	·89254
139	69·50	33·90	·89129
140	70·00	33·38	·89003
141	70·50	32·86	·88878
142	71·00	32·33	·88753
143	71·50	31·81	·88627
144	72·00	31·29	·88500
145	72·50	30·76	·88374
146	73·00	30·24	·88247
147	73·50	29·71	·88119
148	74·00	29·19	·87990
149	74·50	28·66	·87860
150	75·00	28·13	·87730

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
151	75·50	27·61	·87599
152	76·00	27·08	·87467
153	76·50	26·55	·87334
154	77·00	26·02	·87200
155	77·50	25·48	·87067
156	78·00	24·95	·86933
157	78·50	24·42	·86796
158	79·00	23·88	·86659
159	79·50	23·35	·86522
160	80·00	22·81	·86384
161	80·50	22·28	·86244
162	81·00	21·74	·86104
163	81·50	21·20	·85962
164	82·00	20·66	·85820
165	82·50	20·12	·85678
166	83·00	19·58	·85535
167	83·50	19·04	·85390
168	84·00	18·50	·85245
169	84·50	17·95	·85098
170	85·00	17·41	·84950
171	85·50	16·86	·84803
172	86·00	16·32	·84656
173	86·50	15·77	·84502
174	87·00	15·22	·84347
175	87·50	14·66	·84189

RESPECTIVE VOLUMES

OF ALCOHOL AND WATER, AND SPECIFIC GRAVITY.

Per cent.	Alcohol.	Water.	Specific gravity.
	Vols.	Vols.	
176	88·00	14·11	·84031
177	88·50	13·55	·83873
178	89·00	12·99	·83715
179	89·50	12·43	·83550
180	90·00	11·87	·83385
181	90·50	11·30	·83216
182	91·00	10·74	·83046
183	91·50	10·17	·82876
184	92·00	9·60	·82706
185	92·50	9·03	·82527
186	93·00	8·45	·82348
187	93·50	7·87	·82165
188	94·00	7·29	·81981
189	94·50	6·70	·81790
190	95·00	6·10	·81598
191	95·50	5·51	·81394
192	96·00	4·91	·81190
193	96·50	4·31	·80983
194	97·00	3·70	·80776
195	97·50	3·10	·80566
196	98·00	2·48	·80356
197	98·50	1·87	·80137
198	99·00	1·25	·79918
199	99·50	0·62	·79690
200	100·00	0·00	·79461

TABLE No. 8,

GIVING THE POUNDS WEIGHT AND PER CENT. BY VOLUME OF PROOF-SPIRITS IN 1,000 GALLONS OF SPIRITS AT 60° FAHR.

EXPLANATION OF TABLE No. 8,

AND DIRECTIONS FOR ITS USE.

This table enables us to find the strength of spirits when we know their volume and weight. Dividing the pounds by the gallons, we find the average weight of one gallon, or, shifting the decimal point, of one thousand gallons, for which unit the table is constructed.

Suppose that we have found that 325 gallons weighed 2,424 pounds, then dividing 2,424 by 325 we find that one gallon weighed 7.458 pounds, or 1,000 gallons weighed 7,458 pounds.

Looking in the first column of the table for the three figures 745, and at the top of one of the columns for the last figure 8, we find in that column on the same line with 745 the proof 135.8.

This is the true per cent. of the liquor that has been measured at the temperature of 60° Fahr. But if we know or assume it to have been measured at a different temperature, we must proceed just the same as if the proof had been found by means of a hydrometer, viz: we must enter Table 5 with the indicated proof and temperature, and find the true per cent. Thus, if we assume in the above example the liquor to have been at a temperature of 80°, then we find by Table 5 that for indication 136 and temperature 80° the true per cent. is 128.5, and, consequently, for 135.8 it is two-tenths less, or 128.3 per cent.

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
675	192·8	192·8	192·7	192·6	192·6
6	192·2	192·2	192·1	192·1	192·0
7	191·7	191·6	191·5	191·5	191·4
8	191·1	191·0	191·0	190·9	190·8
9	190·5	190·4	190·4	190·3	190·3
680	189·9	189·8	189·8	189·7	189·6
1	189·3	189·2	189·1	189·1	189·0
2	188·6	188·6	188·5	188·4	188·4
3	188·0	187·9	187·9	187·8	187·7
4	187·3	187·3	187·2	187·2	187·1
685	186·7	186·6	186·6	186·5	186·4
6	186·1	186·0	185·9	185·9	185·8
7	185·4	185·3	185·2	185·2	185·1
8	184·7	184·6	184·6	184·5	184·4
9	184·0	184·0	183·9	183·8	183·8
690	183·3	183·2	183·2	183·1	183·0
1	182·6	182·6	182·5	182·4	182·3
2	181·9	181·9	181·8	181·7	181·6
3	181·2	181·1	181·1	181·0	180·9
4	180·5	180·4	180·3	180·3	180·2
695	179·8	179·7	179·6	179·6	179·5
6	179·1	179·0	178·9	178·9	178·8
7	178·3	178·3	178·2	178·1	178·1
8	177·6	177·5	177·4	177·4	177·3
9	176·8	176·8	176·7	176·6	176·5

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
675	192·5	192·5	192·4	192·4	192·3
6	191·9	191·9	191·8	191·8	191·7
7	191·4	191·3	191·2	191·2	191·1
8	190·8	190·7	190·7	190·6	190·5
9	190·2	190·1	190·1	190·0	190·0
680	189·6	189·5	189·4	189·4	189·3
1	188·9	188·9	188·8	188·8	188·7
2	188·3	188·3	188·2	188·1	188·1
3	187·7	187·6	187·5	187·5	187·4
4	187·0	187·0	186·9	186·8	186·8
685	186·4	186·3	186·2	186·2	186·1
6	185·8	185·6	185·6	185·5	185·4
7	185·0	185·0	184·9	184·8	184·8
8	184·4	184·3	184·2	184·2	184·1
9	183·7	183·6	183·5	183·5	183·4
690	183·0	182·9	182·8	182·8	182·7
1	182·3	182·2	182·1	182·1	182·0
2	181·6	181·5	181·4	181·4	181·3
3	180·9	180·8	180·7	180·6	180·6
4	180·1	180·1	180·0	179·9	179·9
695	179·4	179·3	179·3	179·2	179·1
6	178·7	178·6	178·6	178·5	178·4
7	178·0	177·9	177·8	177·8	177·7
8	177·2	177·1	177·1	177·0	176·9
9	176·4	176·4	176·3	176·2	176·1

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
700	176·1	176·0	175·9	175·8	175·8
1	175·3	175·2	175·2	175·1	175·0
2	174·6	174·5	174·4	174·3	174·3
3	173·8	173·7	173·6	173·6	173·5
4	173·0	172·9	172·9	172·8	172·7
705	172·2	172·2	172·1	172·0	171·9
6	171·4	171·3	171·3	171·2	171·1
7	170·6	170·5	170·5	170·4	170·3
8	169·8	169·7	169·6	169·6	169·5
9	169·0	168·9	168·8	168·7	168·7
710	168·2	168·1	168·0	167·9	167·8
1	167·3	167·3	167·2	167·1	167·0
2	166·5	166·4	166·3	166·3	166·2
3	165·7	165·6	165·5	165·4	165·4
4	164·8	164·8	164·7	164·6	164·5
715	164·0	163·9	163·8	163·7	163·7
6	163·2	163·1	163·0	162·9	162·8
7	162·3	162·2	162·2	162·1	162·0
8	161·5	161·4	161·3	161·2	161·1
9	160·6	160·5	160·4	160·3	160·3
720	159·7	159·7	159·6	159·5	159·4
1	158·9	158·8	158·7	158·6	158·5
2	158·0	157·9	157·8	157·7	157·6
3	157·1	157·0	157·0	156·9	156·8
4	156·2	156·2	156·1	156·0	155·9

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
700	175·7	175·6	175·5	175·5	175·4
1	174·9	174·9	174·8	174·7	174·6
2	174·2	174·1	174·0	173·9	173·9
3	173·4	173·3	173·2	173·2	173·1
4	172·6	172·6	172·5	172·4	172·3
705	171·8	171·8	171·7	171·6	171·5
6	171·0	171·0	170·9	170·8	170·7
7	170·2	170·1	170·0	170·0	169·9
8	169·4	169·3	169·2	169·1	169·1
9	168·6	168·5	168·4	168·3	168·3
710	167·8	167·7	167·6	167·5	167·4
1	166·9	166·8	166·8	166·7	166·6
2	166·1	166·0	165·9	165·9	165·8
3	165·3	165·2	165·1	165·0	164·9
4	164·4	164·3	164·3	164·2	164·1
715	163·6	163·5	163·4	163·3	163·2
6	162·7	162·7	162·6	162·5	162·4
7	161·9	161·8	161·7	161·6	161·5
8	161·0	161·0	160·9	160·8	160·7
9	160·2	160·1	160·0	159·9	159·8
720	159·3	159·2	159·1	159·0	159·0
1	158·4	158·3	158·3	158·2	158·1
2	157·6	157·5	157·4	157·3	157·2
3	156·7	156·6	156·5	156·4	156·3
4	155·8	155·7	155·6	155·5	155·4

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
725	155·4	155·3	155·2	155·1	155·0
6	154·5	154·4	154·3	154·2	154·1
7	153·6	153·5	153·4	153·3	153·2
8	152·6	152·6	152·5	152·4	152·3
9	151·8	151·7	151·6	151·5	151·4
730	150·8	150·7	150·7	150·6	150·5
1	149·9	149·8	149·7	149·6	149·5
2	149·0	148·9	148·8	148·7	148·6
3	148·1	148·0	147·9	147·8	147·7
4	147·1	147·1	147·0	146·9	146·8
735	146·2	146·1	146·0	145·9	145·8
6	145·3	145·2	145·1	145·0	144·9
7	144·3	144·2	144·1	144·0	143·9
8	143·4	143·3	143·2	143·1	143·0
9	142·4	142·3	142·2	142·1	142·0
740	141·5	141·4	141·3	141·2	141·1
1	140·5	140·4	140·3	140·2	140·1
2	139·5	139·4	139·3	139·2	139·1
3	138·6	138·5	138·4	138·3	138·2
4	137·6	137·5	137·4	137·3	137·2
745	136·6	136·5	136·4	136·3	136·2
6	135·6	135·5	135·4	135·3	135·2
7	134·6	134·5	134·4	134·3	134·2
8	133·6	133·5	133·4	133·3	133·2
9	132·6	132·5	132·4	132·3	132·2

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
725	154·9	154·8	154·7	154·6	154·5
6	154·0	153·9	153·8	153·7	153·6
7	153·1	153·0	152·9	152·8	152·7
8	152·2	152·1	152·0	151·9	151·8
9	151·3	151·2	151·1	151·0	150·9
730	150·4	150·3	150·2	150·1	150·0
1	149·5	149·4	149·3	149·2	149·1
2	148·5	148·4	148·4	148·3	148·2
3	147·6	147·5	147·4	147·3	147·2
4	146·7	146·6	146·5	146·4	146·3
735	145·7	145·6	145·5	145·5	145·4
6	144·8	144·7	144·6	144·5	144·4
7	143·8	143·7	143·7	143·6	143·5
8	142·9	142·8	142·7	142·6	142·5
9	141·9	141·8	141·8	141·7	141·6
740	141·0	140·9	140·8	140·7	140·6
1	140·0	139·9	139·8	139·7	139·6
2	139·1	139·0	138·9	138·8	138·7
3	138·1	138·0	137·9	137·8	137·7
4	137·1	137·0	136·9	136·8	136·7
745	136·1	136·0	135·9	135·8	135·7
6	135·1	135·0	134·9	134·8	134·7
7	134·1	134·0	133·9	133·8	133·7
8	133·1	133·0	132·9	132·8	132·7
9	132·1	132·0	131·9	131·8	131·7

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
750	131·6	131·5	131·4	131·3	131·2
1	130·6	130·5	130·4	130·3	130·2
2	129·6	129·5	129·4	129·3	129·1
3	128·5	128·4	128·3	128·2	128·1
4	127·5	127·4	127·3	127·2	127·1
755	126·4	126·3	126·2	126·1	126·0
6	125·4	125·3	125·2	125·1	125·0
7	124·3	124·2	124·1	224·0	123·9
8	123·2	123·1	123·0	122·9	122·8
9	122·2	122·1	122·0	121·9	121·8
760	121·1	121·0	120·9	120·8	120·7
1	120·1	119·9	119·8	119·7	119·6
2	119·0	118·9	118·8	118·6	118·5
3	117·9	117·8	117·7	117·6	117·4
4	116·8	116·7	116·6	116·5	116·3
765	115·7	115·6	115·5	115·3	115·2
6	114·6	114·5	114·4	114·2	114·1
7	113·5	113·3	113·2	113·1	113·0
8	112·3	112·2	112·1	112·0	111·9
9	111·2	111·1	111·0	110·9	110·8
770	110·1	110·0	109·8	109·7	109·6
1	108·9	108·8	108·7	108·6	108·4
2	107·7	107·6	107·5	107·4	107·3
3	106·6	106·4	106·3	106·2	106·1
4	105·4	105·3	105·2	105·0	104·9

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
750	131·1	131·0	130·9	130·8	130·7
1	130·1	130·0	129·9	129·8	129·7
2	129·0	128·9	128·8	128·7	128·6
3	128·0	127·9	127·8	127·7	127·6
4	127·0	126·9	126·8	126·6	126·5
755	125·9	125·8	125·7	125·6	125·5
6	124·9	124·7	124·6	124·5	124·4
7	123·8	123·7	123·6	123·5	123·3
8	122·7	122·6	122·5	122·4	122·3
9	121·6	121·5	121·4	121·3	121·2
760	120·6	120·5	120·4	120·3	120·2
1	119·5	119·4	119·3	119·2	119·1
2	118·4	118·3	118·2	118·1	118·0
3	217·3	117·2	117·1	117·0	116·9
4	116·2	116·1	116·0	115·9	115·8
765	115·1	115·0	114·9	114·8	114·7
6	114·0	113·9	113·8	113·7	113·6
7	112·9	112.8	112·7	112·6	112·4
8	111·8	111·7	111·5	111·4	111·3
9	110·6	110·5	110·4	110·3	110·2
770	109·5	109·4	109·3	109·1	109·0
1	108·3	108·2	108·1	108·0	107·9
2	107·1	107·0	106·9	106·8	106·7
3	106·0	105·9	105·7	105·6	105·5
4	104·8	104·7	104·6	104·5	104·3

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
775	104·2	104·1	104·0	103·9	103·7
6	103·0	102·9	102·8	102·7	102·5
7	101·8	101·7	101·6	101·5	101·3
8	100·6	100·5	100·3	100·2	100·1
9	99·3	99·2	99·1	99·0	98·8
780	98 1	97·9	97·8	97·7	97·5
1	96·8	96·7	96·5	96·4	96·3
2	95·5	95·4	95·2	95·1	95·0
3	94·2	94·1	94·0	93·8	93·7
4	92·9	92·8	92·6	92·5	92·4
785	91·5	91·4	91·3	91·1	91·0
6	90·2	90·1	89·9	89·8	89·6
7	88·8	88·7	88·5	88·4	88·3
8	87·4	87·3	87·1	87·0	86·9
9	86·0	85·9	85·7	85·6	85·4
790	84·6	84·4	84·3	84·1	84·0
1	83·1	83·0	82·8	82·7	82·5
2	81·6	81·5	81·3	81·2	81·0
3	80·1	80·0	79·8	79·7	79·5
4	78·5	78·4	78·2	78·0	77·9
795	76·9	76·8	76·6	76·4	76·3
6	75·3	75·1	75·0	74·8	74·6
7	73·6	73·5	73·3	73·1	73·0
8	72·0	71·8	71·6	71·5	71·3
9	70·2	70·0	69·9	69·7	69·5

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
775	103·6	103·5	103·4	103·3	103·2
6	102·4	102·3	102·2	102·1	102·0
7	101·2	101·1	101·0	100·8	100·7
8	100·0	99·8	99·7	99·6	99·5
9	98·7	98·6	98·5	98·3	98·2
780	97·4	97·3	97·2	97·0	96·9
1	96·1	96·0	95·9	95·8	95·6
2	94·9	94·7	94·6	94·5	94·3
3	93·6	93·4	93·3	93·2	93·0
4	92·2	92·1	92·0	91·8	91·7
785	90·9	90·7	90·6	90·5	90·3
6	89·5	89·4	89·2	89·1	88·9
7	88·1	88·0	87·8	87·7	87·5
8	86·7	86·6	86·4	86·3	86·1
9	85·3	85·1	85·0	84·9	84·7
790	83·8	83·7	83·5	83·4	83·3
1	82·4	82·2	82·1	81·9	81·8
2	80·9	80·7	80·6	80·4	80·3
3	79·3	79·2	79·0	78·9	78·7
4	77·7	77·6	77·4	77·3	77·1
795	76·1	76·0	75·8	75·6	75·5
6	74·5	74·3	74·1	74·0	73·8
7	72·8	72·6	72·5	72·3	72·1
8	71·1	70 9	70 7	70·6	70·4
9	69·3	69·1	69·0	68·8	68·6

POUNDS WEIGHT AND PER CENT.

Pounds weight.	0	1	2	3	4
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
800	68·4	68·2	68·1	67·9	67·7
1	66·6	66·4	66.2	66·0	65·8
2	64·6	64·4	64·2	64·0	63·9
3	62·7	62·5	62·3	62·1	61·9
4	60·7	60·5	60·2	60·0	59·8
805	58·6	58·4	58·2	57·9	57·7
6	56·5	56·2	56·0	55·8	55·6
7	54·2	54·0	53·8	53·6	53·3
8	52·0	51·7	51·5	51·3	51·1
9	49·7	49·5	49·3	49·0	48·8
810	47·4	47·1	46·9	46·7	46·4
1	45·0	44·8	44·5	44·3	44·1
2	42·7	42·4	42·2	42·0	41·8
3	40·4	40·1	39·9	39·6	39·4
3	38·0	37·7	37·5	37·3	37·1
815	35·7	35·4	35·2	35·0	34·7
6	33·3	33·1	32·9	32·6	32·4
7	31·0	30·8	30·5	30·3	30·1
8	28·7	28·5	28·2	28·0	27·8
9	26·5	26·3	26·1	25·9	25·6
820	24·3	24·1	23·9	23·7	23·5
1	22·2	22·0	21·7	21·5	21·3
2	20·0	19·8	19·6	19·4	19·2
3	18·1	17·9	17·7	17·5	17·3
4	16·1	15·9	15·8	15·6	15·4

POUNDS WEIGHT AND PER CENT.

Pounds weight.	5	6	7	8	9
	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.	Per cent. proof.
800	67·5	67·3	67·1	66·9	66·8
1	65·6	65·4	65·2	65·0	64·8
2	63·7	63·5	63·3	63·1	62·9
3	61·7	61·5	61·3	61·1	60·9
4	59·6	59·4	59·2	59·0	58·8
805	57·5	57·3	57·1	56·9	56·7
6	55·4	55·1	54·9	54·7	54·5
7	53·1	52·9	52·7	52·4	52·2
8	50·8	50·6	50·4	50·2	49·9
9	48·6	48·3	48·1	47·8	47·6
810	46·2	46·0	45·7	45·5	45·3
1	43·9	43·6	43·4	43·2	42·9
2	41·5	41·3	41·1	40·8	40·6
3	39·2	38·9	38·7	38·4	38·2
4	36·8	36·6	36·4	36·1	35·9
815	34·5	34·2	34·0	33·8	33·5
6	32·2	31·9	31·7	31·5	31·2
7	29·8	29·6	29·4	29·2	28·9
8	27·6	27·4	27·2	26·9	26·7
9	25·4	25·2	25·0	24·8	24·6
820	23·3	23·1	22·8	22·6	22·4
1	21·1	20·9	20·7	20·4	20·2
2	19·0	18·8	18·7	18·5	18·3
3	17·1	16·9	16·7	16·5	16·3
4	15·2	15·0	14·8	14·6	14·4

TABLE No. 9.

TABLE OF FEES OF GAUGERS.

This table is prepared for the use of gaugers in making up their monthly account on Form 150, and is based on the schedule given herein under the head of "Gauger's Fees and Expenses."

It enables the gauger to tell at a glance the amount of his fee for any particular day's work. Thus, if only 5 wine gallons of spirits are gauged on a certain day the fee is 25 cents. If 6 gallons are gauged the fee is 30 cents. If 25 gallons are gauged the fee is $1.10, and so on.

To reach the maximum fee per diem of five dollars, 2,000 wine gallons must be gauged.

This is arrived at as follows:

First	20 gallons at 5 cents - - - - - - - - -	$1.00
Next	40 gallons at 2 cents - - - - - - - - -	.80
Next	240 gallons at ½ cent - - - - - - - - -	1.20
Next	700 gallons at ¼ cent - - - - - - - - -	1.00
Next	1,000 gallons at $\frac{1}{10}$ cent - - - - - - - - -	1.00
Total	2,000 gallons.	5.00

TABLE OF FEES OF GAUGERS.

Galls.	Fees.	Galls.	Fees.	Galls.	Fees.	Galls.	Fees.	Galls.	Fees.
5	$0.25	47	$1.54	116	$2.08	200	$2.50	284	$2.92
6	.30	48	1.56	118	2.09	202	2.51	286	2.93
7	.35	49	1.58			204	2.52	288	2.94
8	.40			120	2.10	206	2.53	290	2.95
9	.45	50	1.60	122	2.11	208	2.54	292	2.96
		51	1.62	124	2.12	210	2.55	294	2.97
10	.50	52	1.64	126	2.13	212	2.56	296	2.98
11	.55	53	1.66	128	2.14	214	2.57	298	2.99
12	.60	54	1.68	130	2.15	216	2.58		
13	.65	55	1.70	132	2.16	218	2.59	300	3.00
14	.70	56	1.72	134	2.17			307	3.01
15	.75	57	1.74	136	2.18	220	2.60	314	3.02
16	.80	58	1.76	138	2.19	222	2.61	321	3.03
17	.85	59	1.78			224	2.62	328	3.04
18	.90			140	2.20	226	2.63	335	3.05
19	.95			142	2.21	228	2.64	342	3.06
		60	1.80	144	2.22	230	2.65	349	3.07
20	1.00	62	1.81	146	2.23	232	2.66	356	3.08
21	1.02	64	1.82	148	2.24	234	2.67	363	3.09
22	1.04	66	1.83	150	2.25	236	2.68		
23	1.06	68	1.84	152	2.26	238	2.69	370	3.10
24	1.08	70	1.85	154	2.27			377	3.11
25	1.10	72	1.86	156	2.28	240	2.70	384	3.12
26	1.12	74	1.87	158	2.29	242	2.71	391	3.13
27	1.14	76	1.88			244	2.72	398	3.14
28	1.16	78	1.89	160	2.30	246	2.73	405	3.15
29	1.18			162	2.31	248	2.74	412	3.16
		80	1.90	164	2.32	250	2.75	419	3.17
30	1.20	82	1.91	166	2.33	252	2.76	426	3.18
31	1.22	84	1.92	168	2.34	254	2.77	433	3.19
32	1.24	86	1.93	170	2.35	256	2.78		
33	1.26	88	1.94	172	2.36	258	2.79	440	3.20
34	1.28	90	1.95	174	2.37			447	3.21
35	1.30	92	1.96	176	2.38	260	2.80	454	3.22
36	1.32	94	1.97	178	2.39	262	2.81	461	3.23
37	1.34	96	1.98			264	2.82	468	3.24
38	1.36	98	1.99	180	2.40	266	2.83	475	3.25
39	1.38			182	2.41	268	2.84	482	3.26
		100	2.00	184	2.42	270	2.85	489	3.27
40	1.40	102	2.01	186	2.43	272	2.86	496	3.28
41	1.42	104	2.02	188	2.44	274	2.87	503	3.29
42	1.44	106	2.03	190	2.45	276	2.88		
43	1.46	108	2.04	192	2.46	278	2.89	510	3.30
44	1.48	110	2.05	194	2.47			517	3.31
45	1.50	112	2.06	196	2.48	280	2.90	524	3.32
46	1.52	114	2.07	198	2.49	282	2.91	531	3.33

TABLE OF FEES OF GAUGERS—Continued.

Galls.	Fees.	Galls.	Fees.	Galls.	Fees.	Galls.	Fees.	Galls.	Fees.
538	$3.34	776	$3.68	1010	$4.01	1350	$4.35	1690	$4.69
545	3.35	783	3.69	1020	4.02	1360	4.36		
552	3.36			1030	4.03	1370	4.37	1700	4.70
559	3.37	790	3.70	1040	4.04	1380	4.38	1710	4.71
566	3.38	797	3.71	1050	4.05	1390	4.39	1720	4.72
573	3.39	804	3.72	1060	4.06			1730	4.73
		811	3.73	1070	4.07	1400	4.40	1740	4.74
580	3.40	818	3.74	1080	4.08	1410	4.41	1750	4.75
587	3.41	825	3.75	1090	4.09	1420	4.42	1760	4.76
594	3.42	832	3.76			1430	4.43	1770	4.77
601	3.43	839	3.77	1100	4.10	1440	4.44	1780	4.78
608	3.44	846	3.78	1110	4.11	1450	4.45	1790	4.79
615	3.45	853	3.79	1120	4.12	1460	4.46		
622	3.46			1130	4.13	1470	4.47	1800	4.80
629	3.47	860	3.80	1140	4.14	1480	4.48	1810	4.81
636	3.48	867	3.81	1150	4.15	1490	4.49	1820	4.82
643	3.49	874	3.82	1160	4.16			1830	4.83
		881	3.83	1170	4.17	1500	4.50	1840	4.84
650	3.50	888	3.84	1180	4.18	1510	4.51	1850	4.85
657	3.51	895	3.85	1190	4.19	1520	4.52	1860	4.86
664	3.52	902	3.86			1530	4.53	1870	4.87
671	3.53	909	3.87	1200	4.20	1540	4.54	1880	4.88
678	3.54	916	3.88	1210	4.21	1550	4.55	1890	4.89
685	3.55	923	3.89	1220	4.22	1560	4.56		
692	3.56			1230	4.23	1570	4.57	1900	4.90
699	3.57	930	3.90	1240	4.24	1580	4.58	1910	4.91
706	3.58	937	3.91	1250	4.25	1590	4.59	1920	4.92
713	3.59	944	3.92	1260	4.26			1930	4.93
		951	3.93	1270	4.27	1600	4.60	1940	4.94
720	3.60	958	3.94	1280	4.28	1610	4.61	1950	4.95
727	3.61	965	3.95	1290	4.29	1620	4.62	1960	4.96
734	3.62	972	3.96			1630	4.63	1970	4.97
741	3.63	979	3.97	1300	4.30	1640	4.64	1980	4.98
748	3.64	986	3.98	1310	4.31	1650	4.65	1990	4.99
755	3.65	993	3.99	1320	4.32	1660	4.66		
762	3.66			1330	4.33	1670	4.67		
769	3.67	1000	4.00	1340	4.34	1680	4.68	2000	5.00

SEP 9

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